DOCUMENT RESUME

ED 172 257 CS 204 929

AUTHOR	Folta, Bernarr Paul
TITLE	Effects of Three Approaches to Teaching Poetry to Sixth Grade Students.
PUB DATE	May 79
NOTE	216p.; Ph.D. Thesis, Purdue University
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Elementary Education; *Figurative Language; Grade 6; Instructional Media; *Language Processing; *Language Skills; *Metaphors; *Poetry; Poets; Symbols (Literary); *Teaching Techniques

ABSTRACT

A total of 272 children participated in a study of the effectiveness of three support systems for cuing sixth grade students in interpreting the metaphoric language of poetry. The first system involved regular classroom teachers who applied their own verbal cuing, the second included external instructional support through media and the teachers' own cuing, and the third provided internal support through the use of teacher/poets. A control group received no special instruction. All three poetry-instruction groups were given the same instructional approach model and the same set of 24 poems from which the teacher selected 16 for use over an eight-day period. A specially prepared version of Form A of "A Look at Literature" was used as a pretest and of Form B as a posttest. An analysis of pretest scores indicated no significant differences among the groups, while posttest scores revealed significant differences among the groups responses that dealt with the interpretation of metaphoric language in poetry. The findings suggest that children learned more in classes with internal or external support than in classes with no unique support system. Appendixes include data used for matching classes within schools, scripts for slides, copies of transparency masters, charts of students' and teachers' ratings of the transparencies, resumes of the three poet/teachers, copies of the poems used, a sample logging page, test instruments, and data dealing with sex as a variable. (Author/FL)

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EFFECTS OF THREE APPROACHES TO TEACHING POETRY TO SIXTH GRADE STUDENTS

A Thesis

Submitted to the Faculty

of

Purdue University

by

Bernarr Paul Folta

In Partial Fulfillment of the
Requirements for the Degree

of

Doctor of Philosophy

May 1979

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ACKNOWLEDGEMENTS

I wish to express my gratitude to all the members of my committee for their encouragement and advice: Dr. Arnold L. Lazarus, Professor of English and chairman of my committee; Dr. Franz J. Frederick, Professor of Education and media-design advisor; Dr. Pose M. Lamb, Professor of Education, and elementary education advisor; Professor Allan R. Starry, Professor of Psychological Sciences and Director of the Purdue University Measurement Research Center; and Professor Felix Stefanile, Professor of English and poetry advisor.

I also wish to thank the three writers who played an important part in this investigation: Carol Burke, Jared Carter, and Donald Seybold. A special thanks goes to my wife, Margery A. Folta, who did all the art work on the transparencies.

I appreciated the efforts of the school administrators in permitting me to work within their schools: Mr. Nelson R. Mosson, Director of Psychological Services for the Lafayette Schools; Mr. Byron M. Hunt, Acting Director of Elementary Education for the Tippecanoe County Schools; and Carmen P. Fabian, Assistant Superintendent for the West Lafayette Community Schools. Elementary school principals directly involved were Donald Fitzgerald, Greg Schneph, Donald Taylor, William Taylor, and David Williams of the Lafayette Schools; Gordon Bohs, Cecil Helmerick, and Ted Hunt of the Tippecanoe County Schools; and Charles Banning, Robert Curtis, John Parente, and Ronald Woods of the West Lafayette Community Schools.

This study would have been impossible had it not been for the efforts of the teachers and their classes. Teachers involved in this study were Claudine Deer, Joe Fife, Shanna Hardison, Sheila Klinker, Callie Marksbury, and Jeff Russow of the Lafayette Schools; Mary Ashley, Charles Bryan, Charles Fausset, Olive Kraft, George Mugford, and Jane Rehm of the Tippecanoe County Schools; and Becky Bryant, Betty Carter, Alice Ohl, Charlotte Quinn and Betty Ratliff of the West Lafayette Community Schools.

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ABSTRACT

Folta, Bernarr Paul. Ph.D., Purdue University, May 1979. Effects of Three Approaches to Teaching Poetry to Sixth Grade Students. Major Professor: Arnold L. Lazarus.

Research suggests that children in sixth grade are at an important threshold in developing basic skills for interpreting metaphoric language in poetry. However, there is also evidence to suggest that children, because of their dependence on concrete operations, need special forms of cuing in learning how to approach the interpretations of poems.

This study investigates the effectiveness of three instructional support systems for cuing sixth grade children in interpreting metaphoric language of poetry. The first support system (Treatment A) involved regular classroom teachers who applied their own verbal cuing. The second system (Treatment B) included external instructional support through given media and the teachers' verbal cuing. The third system (Treatment C) provided internal support through the use of poets. The underlying assumption here is that the teacher who is a practicing poet brings to the classroom a unique set of writing experiences that assist in cuing. A special control group (Treatment D)

who received no instruction in responding to metaphoric language in poetry was also used.

Subjects in this study were taken from sixth grade classes in three different school corporations in Tippecanoe County, Indiana. Through a method of randomization and matching within school systems, the investigator limited the number of subjects from 720 to 272 in 12 intact classes. Each treatment had 68 children and three classes.

The independent variable in this study was the method of instructional support. The dependent variables were the raw scores of children's responses to Form B of "A Look at Literature," particularly 11 critical items that dealt specifically with the interpretation of metaphor in poetry.

All three poetry-instruction groups were given the same instructional approach model and the same set of 24 poems from which the teachers selected 16 poems for instruction over an eight day period.

An analysis of the pre-test scores for Form A of "A Look at Literature" indicated no significant differences among treatments. An analysis of post-test scores showed no significance among treatments in the children's responses to a wide range of reading skills but that there were significant differences among treatments in the children's responses that dealt specifically with the interpretation of metaphoric language in poetry. As a result of the scores for the "11 Critical Items Measurement," the following rank order of mean scores was observed: Treatment C, Poets (highest); Treatment B, Media and Teachers; Treatment D, control; Treatment A, Teachers (lowest). The Newman-Keuls test indicated that differences between Treatments A and B and between A and C were significant at the .05 level. All other differences among treatments were not significant.

The findings suggest that children learned more in classes with internal or external support than in classes with no unique system of support. From data supplied by poets and teachers, it became apparent that Treatments B and C provided more experiential types of activities, whereas Treatment A provided more referential activities in approaching poetry. Teachers in Treatment B were given two films, twenty slides, and sixteen transparencies to prime children to interpret images as symbols and to experience tension in the poems through contrasting images. The poets in Treatment C were caught up with the dynamics of interchange in discussing levels of meaning, frequently shifting between the literal, and the symbolic, constantly weaving webs of meaning based on experience. Approaches used by the teachers were often based on referential guidance, with the teachers frequently limiting and sometimes telling the responses.

CHAPTER I INTRODUCTION

One sensitive task for elementary teachers in language arts is to help children understand and appreciate poetry: in essence, to help children acquire a sense for experiencing the metaphoric language of poetry and a critical sense for evaluating its usage. The term "metaphoric sense" is being used here to mean the reader's inclination to sense the relationships between the symbolic and the literal events in the language of a poem. In this case, "metaphoric" serves for all figurative comparisons as well as all sounds, movements, and shapes which render meaning to the poem. In this study, "symbolic" and "metaphoric" are analogous: both pertain to a doubleness in meaning; both relate to two or more referents, although the term "symbolic" more often pertains to the personae generated by multiple comparisons between the literal and the figurative.[1]

Nothing is more characteristic of poetry than the language of metaphor; and, yet, to the elementary teacher, nothing is more challenging than guiding children to discover meaning in the many different metaphoric events operating within the poem.[2] The challenging task for the teacher, as perceived by this investigator, is described in terms of four operations: (1) getting the children to identify and to interpret key metaphoric events, (2) cuing children to search for relationships among metaphoric events, (3) guiding children in chaining the metaphoric events to a generalization about the meaning of a poem, and (4) testing and reinforcing the children's interpretations of a poem. These four operations represent a synthesis of key teaching objectives identified by a wide range of poets, educators, and literary critics.

The first operation involves getting the children to see and to hear what is happening in the poem. In analyzing key metaphoric images with the class, the teacher guides the children in identifying points of similarities and differences between the concrete referents or the images being compared. For example, in the phrase "the mountain's rage," the teacher would guide the pupils to see points of similarity and difference between acts of rage by a person and "acts of rage" by a mountain. In addition to getting children to focus on metaphoric images, the teacher might also cue the children to listen for different voices and sounds working together in the poem. For example, in these lines from a poem by Denise Levertov, the teacher must guide the pupils in discovering an experience about the relationship between the motion of the waves and the turning of pages.

> And as you read
> the sea is turning its dark pages,
> turning
> its dark pages.

Generally, the teacher's task involves getting the children to first experience the poem, approaching the unknown in terms of the known.

The second operation challenges the teacher to guide the pupils in discovering relationships among metaphoric events. Often the relationships are signalled by structural or imagistic contrasts. In arriving at the meaning of Kenneth Patchen's "An Easy Decision," for example, the reader is forced into a comparison of two families: one family is described as a man and his wife riding on a pony with seven kids running alongside them; the other family consists of a couple with nineteen kids and all of them are riding on a big smiling hippopotamus. The speaker of Patchen's poem easily decides that he would like to invite the family on the hippo to dinner. Once the reader "sees" that the children in one of the families ride with the parents and the children in the other family run along side the parents, he is in a position to draw an inference about Patchen's "Easy Decision." The task of the teacher is to put the children into a position so they can draw inferences. To do this, the teacher must cue the children to search for antinomies created by the juxtaposition of images or movements within a poem.

The third operation involves the teacher in guiding the children in arriving at a generalization about the meaning and/or intent of the poem. After examining works such as John Ciardi's "Mummy Slept Late and Daddy Fixed Breakfast" or E. E. Cummings' "Jake Hates all the Girls," the children, through cuing by the teacher, should be able to conclude that the poet in each case was not trying to say anything profound but, instead, was playing around with words merely to delight the senses of the reader. On the other hand, after examining works such as William Stafford's "Traveling through the Dark" or William Blake's "The Poison Tree," the pupils, through cuing by the teacher, should be able to chain some of the key metaphoric events to a generalization about the meaning of the poem. The job of the teacher is to guide the children in synthesizing the meanings attached to several of the metaphoric events in the poem so the children themselves can make a statement about a key relationship between the poet's use of language and a possible interpretation. More specifically, after analyzing a poem such as Gwendolyn Brooks' "Pete at the Zoo," the teacher must cue the reader to chain the elements which suggest the speaker's fear of being alone. There are many elements in this poem operating to signal the relationship between the speaker and the elephant. The most obvious are the lines "Does he hunch up, as I do / Against the dark of the night?" This comparison is direct here, but within the words "hunch up" and "Against the dark of night" are embedded other meanings. The interlacing of images with rhyme add to the meaning of the comparison, also: "...lonely in his stall / ...all the boys and girls are gone / ...no shout at all..." All of these are elements the teacher and the pupils can play with in interpreting the poem.

PETE AT THE ZOO

I wonder if the elephant
Is lonely in his stall
When all the boys and girls are gone
And there's no shout at all,
And there's no one to stamp before,
No one to note his might.
Does he hunch up, as I do
Against the dark of night?

Once the children demonstrate a readiness to generalize about the meaning or the intent of the poem, the teacher becomes involved in the fourth operation in teaching children how to analyze poetry: testing and reinforcing the children's interpretations. A natural form of testing appears in terms of the teacher asking questions such as "What did you see in the poem that made you believe that's what the poet meant?" or "Which lines in the poem best support your interpretation?" On occasion, the teacher's tests might appear in terms of a suppositional tag and a question: "That's very interesting. If what you are saying is true, how would you explain the meaning in the sixth line of the poem?" Still another form of testing can occur outside the discussion directly related to the poem. If, for example, the teacher made it a point to get pupils to recognize imaginative comparisons used in a battery of poems, the teacher might then lead the pupils to distinguish flat comparisons from imaginative comparisons.[3] In all of these cases, the object is to place the pupil in a position to defend a judgement without feeling threatened and to acquire skills in critical reading.

In summary, it is proposed that the four operations for teaching poetry must involve children in (1) identifying aspects of metaphoric language, (2) establishing relationships among the parts within the poem, (3) applying the parts of the poem to a generalization about the poem's meaning, and (4) testing the validity of that generalization. The validity of these operations has not been systematically tested previously.

The Problem

The very delicate task for teachers in the elementary schools is to take the children from the concrete operations of experiencing the poem to a point of generalizing about the poem's meaning. Too often there is a tendency for the teacher to pre-empt experience and to talk about what the poem means rather than to provide experiences that show the children how the poetic elements operate to make the poem. This tendency encourages children to paraphrase the meanings of poems without understanding how key poetic elements allow meanings to evolve. Children, those in the elementary schools particularly, need the experiential activities to arrive at an understanding of the poem. Piaget tells us that school children under 11 are mainly dependent on concrete operations which, "in the majority of cases, are insufficient for the analyses of phenomena."[4] According to Piaget, children from ages 11-15 leave the stage of concrete operations and enter the stage of formal operations, which allow them to abstract qualities from phenomena for the purpose of complex hypothesizing.

Realizing that children in sixth grade will still be dependent on concrete operations to some extent, the teacher must find ways to cue children in developing a bridge between their concrete experiences with a poem and in forming a generalization about the poem's meaning. The teacher must search for answers to questions such as: "What kind of cuing will facilitate the children's understanding of the poem? Since children are still dependent on concrete operations, and since concretions or images are the elements compared in metaphor, would it make any difference if I used visual cues as well as verbal cues? And after all the cuing and discussing of poetry, what evidence is there that the children will be able to approach another poem on their own and demonstrate they have acquired a sense for metaphor in the language of poetry?"

Finding the answers to these questions is critical to the teaching of poetry. If the teacher is not sensitive to the children's needs for experiential activities and special cuing, and proceeds to discuss poetry only in ways that invite paraphrase, important opportunities for children to acquire critical reading skills and to discover the operations of metaphor in poetry will be lost. Teachers must search for ways to lead the children into sensing the tension between the literal and the symbolic, between the factual and the metaphoric; and then they must search for ways that the children might speculate on the poet's metaphoric treatment of the subject.

Research Questions

Most relevant to this study are the following questions:

1. Is it possible for sixth grade students who have received instruction in poetry to demonstrate a better understanding of metaphoric language than those sixth grade students who have not received instruction?

2. Is it possible to devise an external instructional support system that helps pupils to better visualize and better understand metaphoric events in poetry?
3. Is it possible that only a poet/teacher can provide adequate instruction in teaching children to understand metaphoric language in poetry?
4. Would there be any differences in the effectiveness of programs that contained unique internal or external structural support for instruction in poetry as opposed to a program without such support?

Purpose

The purpose of this investigation was to examine the effectiveness of methods of instructional support provided in three treatments in sixth grade children's study of poetry. One treatment involved an external instructional support system through the use of media; a second treatment involved internal instructional support through the use of a poet/teacher rather than the regular classroom teacher. The underlying assumption here is that the poet/teacher brings to the classroom a richness of experience in metaphoric construction and a relatively broad range of familiarity with poems, both providing insights for unique approaches to verbal cuing. The third treatment involved no unique approach either through internal or external instructional support systems. All three treatments used sixteen poems from a given set of twenty-four, and all three treatments followed a common approach model that included four stages of instruction: (1) Induction, (2) Speculation, (3) Search, and (4) Application.

CHAPTER II A REVIEW OF THE RESEARCH

Central to the background for this investigation are studies describing children's responses to metaphor, poets' experiences in the classroom, and the teachers' use of media to teach poetry. Studies related to these three topics will be discussed in this chapter. Since my entire investigation is based on interpretations of metaphor in poetry, a segment of this review will be devoted to aesthetics, also. The chapter begins with a discussion of key poetic elements that characterize "metaphoric language."

Writer, Metaphor and Reader

In his opening remarks at the 1978 Literary Awards Banquet at Purdue University, playwright Edward Albee cited man's ability to use metaphor as the major distinguishing trait between the human species and all other animals.[5] The critic Kenneth Burke said essentially the same thing when he wrote "Man is the symbol using animal."[6] Poet and critic John Ciardi took Burke's statement a step further in writing "Thoughts are made of pictures....It would seem to be impossible for man to think in any depth were he not able to see pictures in his mind's eye."[7]

Albee's actions in drama, Burke's "dramatistic" symbols in literature, and Ciardi's images in poetry all relate to a doubleness in meaning, which essentially is characteristic of metaphor. This doubleness in meaning may be delivered through imagery, form, or action.[8] In poetry, for example, it may be delivered through the selection of nouns, the predications of subjects, the selection of colors, the use of numbers, the juxtapostion of events, the shape of the poem, the sounds of words, the rhythm and the motion of a poem, the interlacing of rhyme, the division of stanzas, the speaker-listener relationship within the poem, and actually much more since "imagery" is now universally understood to pertain to any and all concrete objects that appeal to any of the senses. As the critic I. A. Richards tells us: "Nowhere but in poetry, unless in mathematics, do we meet with ideas [and images] so closely packed together, so tightly woven."[9]

Two twentieth century literary movements that largely influenced the degree of compression found in modern poetry are the Imagist Movement and the French Symbolist Movement. The Imagists were concerned with the realm of finite things that represented reality in accurate, concrete terms "without moaning or whining or moralizing." They were interested in producing poetry that was "hard and clear," poetry that was "never blurred nor indefinite." They believed that the image should create an impact upon the reader, the shock of the impact abetting the transmission of emotion from the poem to the mind of the reader.[10] For the Imagists, the design of an image was a unit, and this unit was a poem. For the Symbolists, however, the image was a fragment in a complex assemblage of units. To arouse a complex network of emotions, the Symbolists formed elaborate assemblages of single-image units.

The Imagist Movement really began around 1908, with T. E. Hulme's organization of the Poet's Club. At that time, the French Symbolist Movement had been underway for more than twenty-five years. However, by 1915, both movements came closer together. The two were alike in the sense that they forced the reader to construct the significant shape of the poem multi-directionally out of the set of given points. They were different in the sense that the Symbolist would actively involve the reader through a chain of connotative events, whereas the Imagist only offered the reader sense-arousing stimuli which did not have as their aim an overt relatedness of referent to symbolic values.[11]

The Symbolists were concerned with the precision of the images, but they were more concerned with the images' suggestive powers and (like the phenomenologists) with the chaining of connotative values within the structure of a poem. Each symbol in a poem would have to contain something in its field of connotation to link with the other symbols in a series. To put it another way, "They were concerned about the qualitative progression of images to the point of mathematical precision."[12]

Largely as a result of these two early twentieth century movements, the diction in much of modern poetry evolved into a highly compressed language, to the point where the audiences for modern poetry were limited, for the most part, to the literati themselves. It was not until mid-century that diction in modern poetry became more meaningful to larger audiences. The fact remains, however, that the essences of many modern poems hinge on choices of metaphoric images within the compressed line. To find evidence of this dependence on imagery, one only needs to reread the poems of Wallace Stevens, T. S. Eliot, Ezra Pound, William Carlos Williams, E. E. Cummings, A. W. Auden, Dylan Thomas, Robert Lowell, Theodore Roethke, May Swenson, James Wright, Denise Levertov, and Randell Jarrell, to mention only a few poets within the last fifty years. The point to be made here is that, generally, all poetry forces the reader to search for relationships between the literal and the symbolic events; modern poetry, however, demands a particularly close scrutiny of the ways in which the metaphoric elements have been manipulated.

When unsophisticated or would-be poets write "a rafter is like a ceiling-beam" or "a filament is like a wire," they are making unimaginative, unpoetic comparisons, comparisons that are too literal, too close to actuality. Only if the elements compared are dissimilar to the actual (for example: "the rafters were like bones"; "the filament was like a smoke-curl") is poetic comparison--"right surprise"--generated. To experience "right surprise" in any poetry, moreover, the reader must understand how the metaphoric images control the poem as a whole. The discerning reader must be able to discriminate between those images that are merely unrelated items of sensory detail and those that conceptually involve metaphoric comparisons.[13] For example, in reading "Whitman's Leaves of Grass, one finds many details that serve as mere sensory in-put, labels, or catalogue items. More often, however, Whitman's poems deliver lines with metaphoric comparisons in context. The reader must distinguish between the images used for sensory in-put and those used for more imaginative purposes. If the reader accepted only the literal meaning of Whitman's "If you want me again, look for me under your soles," for example, there is a good chance that he would leave the poem with the notion that Whitman had gone mad from having written a very lengthy poem.

It is the writer's non-literal manipulation of metaphoric elements and the reader's response to those elements that is key to understanding and appreciating. Aesthetically, the task of the writer is to manipulate the metaphoric elements in context so that they merge with those "patterns of human behavior and belief that come charged with a primary emotional force" within the reader.[14] As T. S. Eliot puts it:

> The only way of expressing emotion in the form of art is by finding an 'objective correlative'...a set of objectives, a situation, a chain of events which shall be the formula of that particular emotion...[15]

For the reader to experience any such formula, he must first be able to interpret objects, situations, and events as metaphoric. Secondly, the reader must be able to identify and test-out schemata based on the perceived order of symbols against a conceptual background of values suggested by the poet. The reader must see the metaphoric images as fixed in a connotation field that sets off a series of explosions in meaning. The chaining of such events should lead the reader to experience the formula and its "right surprise."

Directing the reader in his chaining of metaphoric symbols is the reader's own perception of the poem's tension. John Ciardi describes this tension in terms of the poem's countermotion; Ralph Waldo Emerson alluded to it in terms of natural facts versus spiritual facts;[16] William Butler Yeats referred to it in terms of a felt unity of disproportions;[17] Wallace Stevens described it in terms of the line between the world around us and the world within us.[18] Generally, all the descriptions have the commonality of harmony based on discordance or dissimilarities and antinomies.

Specifically, Ciardi describes tension in these terms:

> All the elements of a poem are engaged in a series of countermotion. Meter and rhythm are all only two elements that may be involved. Diction, imagery, rhyme, line length, vowel qualities, consonant sequence, and grammatical structure are some of the other principal elements...One simple rule seems to apply to the play of all such countermotion: whenever in the course of a poem the poet changes either his tone or his attitude, some changes will occur in the handling of the technical elements.[19]

Contrasting images should provide for the reader the clues necessary to identify the antinomies or the major sources of tension within the poem. Once the reader recognizes these major sources of tension, he is in the position to examine the work as a simultaneous whole. If the reader establishes himself in this position, he can be a detached, critical observer; or , if he prefers, he can re-enter what Yeats called "the Great Memory" [the Collective Unconscious] towards which the personal memories of the poet and the reader "would be pulled by the inherent force, the gravitational pull, the magnet-like symbol itself."[20]

On the other hand, if the reader does not experience the work as a whole, he probably responds to the poem only woodenly "like a dancer moving in measure with the rhythm of continuity."[21] Northrop Frye labels this type of response to poetry as "pre-critical." This researcher suspects that most children at the sixth grade level are at this stage of responding to poetry, and that it is the task of the teacher to coach students towards more critical responses.

Children's Responses to Metaphor

Ann Terry's Children's Poetry Preferences (1974) has attracted the attention of teachers and researchers interested in understanding children's responses to poetry. Terry conducted a national survey to find out which poems of 113 poems selected for the study were the most enjoyed and the most disliked by children in Grades 4-5-6. In her report, she identified 25 most popular poems and 25 most disliked by children in the upper elementary grades. Terry analyzed responses from 422 students selected at random from 1,276 children distributed in 42 classrooms in a four state area: Florida, Pennsylvania, Texas, and Ohio.

Three major conclusions by Terry are summarized as follows:

1. Children disliked listening to haiku and free verse and preferred narrative poems and humorous poems, like limericks and nonsensical rhyming verse. The children had an "intense dislike" for sentimental poems or serious ones.
2. Poetry that depended primarily on imagery for its appeal was also disliked. Too often this type of poetry was too subtle and too difficult to understand. "Poems containing imagery or figurative language may not be the best choices for elementary children."

3. Teachers did not do enough with poetry in the classroom. Approximately three-fourths of the teachers in the survey said they read poetry to their classes occasionally or once a month; 29 of the 42 teachers said they had students write poetry occasionally or very seldom.

In speculating on reasons for the students' rejection of poetry that depended largely on imagery, Terry implied that children in Grades 4-5-6 may not be ready to understand the use of metaphoric language.

> Students frequently found poems containing the poetic elements of imagery and figurative language unenjoyable and sometimes difficult to understand. Because of the presence of these elements, the meaning of the poem becomes less obvious. It may be that the elementary school child who has not reached the stage of formal operations in his intellectual development is simply unable to comprehend the meaning of such poems.[22]

Terry's speculation that upper elementary children may not be at a stage of intellectual development best suited for imagistic poetry is complemented by David Elkind's notion that children are not ready for metaphor until adolescence. In interpreting studies by Piaget, Elkind describes the period of formal operations as a time when adolescents develop the capacity to utilize a second symbol system.

> Words carry much more meaning because they can now take on double meanings, they can be both things and other symbols. It is for this reason children seldom understand metaphor, double-entendre, and cartoons.[23]

Even though Elkind believes that children are not ready for metaphoric imagery in poetry, he believes that some basic poetry reading skills should be taught to children in the elementary grades. By "skills" he means that children should develop a "sense of power and respect for language" when listening to a poem read by an adult who reads with feeling.[24]

Counter to what Terry and Elkind have implied about the children's readiness to cope with metaphoric imagery are studies by the National Assessment of Educational Progress (NAEP, 1972), by Smith (1973), and by Brause (1975) which suggest that children in the intermediate grades do have the intellectual capabilities to respond to metaphoric imagery successfully. In stratified national samples of 9 year olds, 13 year olds, 17 year olds, and adults aged 26-35, the NAEP reported that in four metaphoric comprehension exercises administered to 9 year olds, the children gave correct responses in 47.3%, 75.5%, 63.4% and 70.3% of the cases respective to each exercise. The battery of exercises for "Comprehension of Metaphors" included both multiple choice items and oral explanations. For example, the children read Carl Sandburg's poem "Fog" and then responded to a multiple choice item which dealt with metaphoric imagery in the poem. In that exercise, 63.4% of the 9 year olds responded correctly. In the oral explanation of the fog metaphor, 70.3% of the 9 year olds responded correctly.[25] The exact Ns for this test were not cited in the NAEP report; however, the minimum number of any age group completing a test packet was 2199.[26]

Table 1
NAEP COMPREHENSION OF METAPHOR

Exercise	Description	Age	%
R 111A	"Hope is a thing with feathers"	9	47.3
		17	87.5
		Adult	76.5
R 112A	Explanation of Hope metaphor	9	75.5
		17	85.5
		Adult	81.0
R 113A	"The fog comes on little cat feet"	9	63.4
		13	81.5
		17	85.2
R 113B	Explanation of fog metaphor	9	70.3
		13	79.9
		17	89.7

Caution must be used in interpreting the results of the NAEP study on the comprehension of metaphor. For 9 year olds, the comprehension of metaphors test covered only four exercises, which some may argue really do not tell enough about children's understanding of metaphoric images. Other critics of the test may argue that the design of the multiple choice questions, particularly the question related to Sandburg's "Fog," were poorly phrased and that the subjects taking the test might have scored higher if the questions had been less ambiguous.[27] Perhaps the most important reason to show caution is that the test on metaphors was just one test out of six used in a national assessment of four different age groups' understanding of imaginative literature. However, the fact remains that in three of the four exercises most of the 9 year olds of a large number tested demonstrated an ability to grasp the given metaphors.

A more in-depth study of responses to metaphor was conducted by James W. Smith, who compared interpretations given by children in Grades 6 and 8. Smith carried out extensive interviews with 40 children in each grade, drawing from two Grade 6 classes and six Grade 8 classes in the Edmonton Public School System in Edmonton, Canada. After reading each of the ten given passages containing a metaphor, the children were given a list of 14 words and asked to identify the words most relevant to the subject of the metaphor and to give explanations for their choices. Based largely on the children's explanations, the responses were then categorized as Irrelevant, Translation, Interpretive, or Elaborative, the last three being different types of appropriate responses. Those identified as "Translation" were characterized by the use of commonly accepted meanings. Interpretive responses were those in which the child drew inferences from the metaphorical usage. Elaborative responses were those which indicated an imaginative extension of ideas through imagery and further conceptualization.[28]

Smith reported that most children had no difficulty in understanding the literal meanings of the metaphors. In fact, less than 1% of the children's responses at either grade level was categorized as Irrelevant. Smith concluded that most children understood the metaphors at a relatively sophisticated level. However, he did observe that the children in Grade 8 scored significantly more Interpretive and Elaborative responses than did the children in Grade 6. Smith also noted that many of the Grade 6 children who scored in the lower categories of response largely depended on concrete operations in interpreting metaphor. It should also be understood here that the STEP reading scores for the children in Grade 6 were considerably lower than the reading scores for the children in Grade 8. For Grade 6, scores ranged from the 6th percentile to the 93rd; the mean score on the STEP test was 55. For Grade 8, scores ranged from the 90th percentile to the 98th; the mean score was 95.7.[29]

The instrument used in Smith's investigation was The Associated Commonplaces Test, derived from Black's theory of metaphor and designed by Smith himself. Essentially, Black's theory of metaphor is that metaphor suppresses some details and emphasizes others about an object--in short, it organizes the reader's view of the referent. By asking the student to choose from a variety of associations for the subsidiary object, the experimenter could investigate which meanings were emphasized and which were supressed within the perceptual range of the reader.

Furthermore, by questioning each child about his choice, the experimenter could determine the manner of "dynamic cognitive action" by which the pupil selected meanings.[30]

More specifically, after reading a short passage such as Carl Sandburg's "Fog," the children were presented a list of fourteen words, some of which could be identified as "appropriate" associations for the given metaphor. Words such as "silent" and "graceful" would be considered appropriate associations. On the other hand, words such as "thump" and "scratch" would be inappropriate choices. After the children identified their choices and explained them, two judges categorized the responses into the four divisions cited earlier. Using the Arrington Formula for Reliability, the experimenter computed the following coefficients for the two judges' ratings in each of the response categories: Irrelevant, .92; Translation, .84; Interpretive, .82; Elaborative, .78.[31]

Smith recognized that a number of limitations in the design of his study militate against generalizing that the findings can apply to children of all socio-economic backgrounds. His population came from a high socio-economic background and more than half of the children read well above average. The narrowness of the random target and the subjective analysis of only two judges set limitations on the findings. However, Smith's attempt to invent a new test to measure the comprehension of metaphors, his observations about children's use of language, and his recommendations to teachers in developing reading skills are worth noting.[32]

In a more recent study, Rita Brause (1975) investigated the abilities of 40 adults and 50 children to understand aspects of semantic ambiguity framed within seven different types of linguistic structures: (1) Two meanings of a word in unambiguous contexts, (2) Multiplicity of pronoun referents, (3) Figurative language, (4) Symbolic language of proverbs, (5) Lexical ambiguity, (6) Surface structure ambiguity, and (7) Deep structure ambiguity. The purpose of the study was to determine a hierarchy of understandings about language based on previous hypotheses in semantic development by Werner and Kaplan, Piaget, Bruner, Vygotsky, and others. Of particular importance is the Piagetian claim that the individuals will initially interpret metaphors as one unit and later be able to relate the parts to the whole.[33]

The 50 children in this study were at grade level or no more than one year above grade level in their reading scores on the Metropolitan Achievement Test. Ten children from the New York City Public Schools in Grades 2, 4, 6, 8, and 10 were administered three sentences for each item in the given hierarchy of understandings and then asked to explain the meanings in each sentence. The 40 adults, who were asked to accomplish the same tasks, came from a variety of backgrounds and consisted of 10 high school dropouts, 10 high school graduates, 10 college students, and 10 college graduates.

Each sentence used in the study was recorded on a 10-second audio loop cassette and presented to the person in a private interview. After the person listened to the sentence and explained its meaning, the experimenter classified the response as "Acceptable" or "Unacceptable." "Acceptable" responses were pre-determined by two doctoral candidates in linguistics. To meet the test of understanding for each item in the hierarchy of sentences, the subject had to offer an acceptable explanation for at least two of the three sentences given for each item.

Brause observed that, with the exception of response to the items representing "symbolic language in proverbs," 87 of the 90 participants met the criterion of at least one aspect of each stage before proceeding to the next stage in the revised hierarchy. She concluded that understandings of symbolic language appear to develop independently of one's ability to understand the other structures.[34]

Table 2
BRAUSE'S SUBJECTS WHO MET THE CRITERION IN
EACH ASPECT OF SEMANTIC DEVELOPMENT

Stages		2	4	6	8	10	DO	HSG	COL	CG
1.	Single Meaning	10	10	10	10	10	10	10	10	10
2.	Lexical Ambiguity	2	5	8	8	9	5	5	9	9
	Figurative Language	1	6	7	7	10	5	10	10	10
3.	Surface Structure	2	3	3	5	10	4	8	9	10
	Pronoun Referents	0	1	4	2	8	4	8	9	10
4.	Deep Structure	0	0	2	2	6	2	6	4	7
Independent:										
	Symbolic Language	0	0	1	4	5	1	10	10	9

Focusing on only the responses to figurative and symbolic language, one can observe that children in Grades 4, 6, 8, and high school dropouts could interpret figurative language in sentences such as My father was tied up at a meeting this morning; however, many could not successfully interpret the symbolic language in a proverb such as Still water runs deep. Both are actually forms of metaphoric language. The proverb, however, requires the reader to perform more operations to arrive at the meaning. In the first sentence, both the vehicle and the tenor of the metaphor are stated explicitly. In the second sentence, the real vehicle is not stated; the reader must search outside the given metaphor for the vehicle and an applicable context. Perrine (1956) makes a clear distinction between these two types of metaphors as comparison.[35]

Brause's findings related to figurative and symbolic language support the Piagetian claim of development from syncretism to analysis. Her findings support the notion that symbolic language is realized gradually through the individual's extension of verbal schemata by accommodation. If the individual is unfamiliar with the words and the concepts related to the metaphor, this accommodation can not occur.[36]

Collectively, the findings by Brause, Smith, and the NAEP suggest that children in the intermediate grades do have the facility to interpret metaphoric language that contains referents within the realm of their experience. It would also seem possible that children, given proper guidance, can acquire skills in chaining their observations about metaphoric events in a poem to arrive at one or possibly several different meanings. In the implications of their studies, both Brause and Smith advise the teachers on ways to improve the children's facility for becoming better interpreters of metaphoric language. Brause believes the teachers should encourage language development by exposing children frequently to puns, riddles, and more advanced structures that make the children stretch their own thinking.[37] Smith believes that teachers should encourage children "to produce a variety of responses to metaphors, rather than their immediate, often pedestrian, interpretations." Smith also believes that children should be challenged to identify supporting details through discussing, questioning, and evaluating the use of metaphors within a context of a story or poem.[38] The implication from the advice given by Brause and Smith is that children can be more successful than they are at the present in interpreting metaphor if teachers provided the supportive environments for language development.

Undoubtedly, both David Elkind and Ann Terry could not reconcile children's responses to metaphoric imagery with concept formation and Piagetian staging of formal operations. However, Piaget himself characterizes the period of formal operations as a developmental stage in which the child begins to develop a combinatorial system for handling all possible combinations in arriving at the set of possible hypotheses compatible with the given data. His characterization does not preclude the chaining of a limited number of potential meanings of figurative language to arrive at the meaning of a poem related to the child's experiences. Piaget and Inhelder distinguish between concrete and formal equilibrium of the totality of potential and possible operations and that the first can handle only a limited set of potential transformations.[39]

Rudolph Arnheim argues against current psychological theory that abstraction for concept formation involves a process based on sensory data but leaves them behind and abandons them totally as the individual develops to greater heights in the final stages of formal operational thought. "Even in our own time we still meet the belief that a conception, in order to be truly abstract, must be free from any perceptual collateral, which would be viewed as an impurity."[40]

Taking the Gestalt view, Arnheim believes that the thought elements in perception and the perceptual elements in thought are complementary. "They make human cognition a unitary process, which leads without break from the elementary acquisition of sensory information to the most generic theoretical ideas."[41] Arnheim sees abstraction as being the essential trait of this uniting cognitive process at every level. Arnheim's views, therefore, run counter to what Terry and Elkind have implied about children's readiness to cope with metaphoric language. His view is that children can abstract meanings of imagistic metaphors to arrive at a concept about the meaning of a poem, providing the children's experiences of the world allow them to understand the events in the poem.[42]

A recent study of how older children respond to images in poetry was conducted by Collett Dilworth, who carefully delineated the views on imaging and abstracting expressed by Arnheim, Piaget, Bruner, Paivio, Vygotsky, and many others. The purpose of Dilworth's study was to determine the effect of students' abilities to visualize events in poetry. One of his major conclusions was that visualization appears to be the most important variable in the more abstractive functions of poetic interpretation, thus providing no reason to reject Arnheim's notion that cognition is essentially visualization.[43] The studies by Dilworth, Brause, and Smith suggest the importance of creating supportive environments that would help children to visualize metaphoric imagery in poetry.

Support Environment: Poets in the Schools

Stephen Dunning, former President of the National Council of Teachers of English, once advised: "The way teachers can improve the reputation of poetry is to improve their teaching of poetry."[44] Implied in that statement is the notion that poetry in the public schools has suffered and so have the children. A variety of reasons have been attributed to the children's negative response towards poetry: poor selections of poems by textbook companies or by teachers,[45] the use of metaphoric imagery,[46] the difficulty in the syntax of poetic language,[47] poor teacher training,[48] oppressive environments in the schools,[49] and the lack of skills on the part of teachers who teach poetry.[50] The poet David McCord believes that "Teachers should have a firm background of poetry themselves; but lots of teachers unfortunately don't. Poetry, in fact, is often mild anathema to them..."[51]

The reputation of poetry became enough of a concern for the federal government to begin funding programs to assist the public schools in the teaching of poetry. In 1966, the National Endowment of the Arts began pilot projects with 30 poets in five urban community poet-in-the-schools programs. By the 1975-1976 school year, 890 poets were engaged in programs throughout the United States, involving 570,000 students, 13,000 teachers, and 2,400 schools.[52]

The unique advantage given by the poets is their insights into the use of metaphoric language and their relatively broad range of experience with many poems. As Margret Woodworth, one of the Indiana poets-in-the-schools, puts it: "We know what it's like to be bubbling over with STUFF--ideas, discoveries, images, comparisons--and how very difficult it is to put it all into a very meaningful form."[53] It's the poet who knows how to get children to look for poetic elements which add tension to the poem and then have the children adapt those poetic elements to their own experiments with language. It's the poet who knows when to tell a child to condense his simile to a metaphor.

A statement frequently echoed by poets is: "What's important is not what the poem says, but--rather--that a poem is." Owen Thomas warns that "As adults, we probably look too hard for the meaning of a poem, when--in fact--the most important quality is the being of the poem."[54] "Striking images, beautiful sound values, a tight or recurrent rhythm, or a surprising twist at the end of a landscape...": these are the types of events that allow a poem to be; these are the events that allow a rendering of feeling.[55]

There is something in the poets' view of language that makes them look freshly at not only the poems they teach but also the poems and the stories they receive from their pupils. Poets know when to get excited about the way children express themselves. Lee Perron, a poet living in California, found that "The single most rewarding element in being the poet in the schools is the constant renewal of wonder in the language."[56] And according to Felix Stefanile, writer and poetry editor of Sparrow Magazine:

> ...poetry teaches us all to use language as though we owned it, as though we invented it for the first time, and the young mind turned on to his new-found source of self-discovery --language that he can make his own--will learn to see, and make the world.[57]

Most poets in the schools pride themselves in having a unique approach to working with children. The New England poet Clint Baer, for example, frequently has his pupils write riddles. "Having children write riddles is perhaps the best way I know to teach metaphoric thinking--seeing one thing in terms of another--without having to mention metaphor."[58] On the other hand, poets like Lee Perron stress the oral art of poetry. Perron frequently has his students reciting poems, singing songs, chanting chants, telling stories, working out exercises in alliteration, consonance, assonance, rhyme, rhythm, and meter.[59] A few poets like Peggy Woodworth will involve the children in word games, especially rhyming word games. "The images that are evoked," says Woodworth, "suggest a multitude of new ideas and words that aren't part of the student's everyday thought patterns."[60]

Most poets approach the teaching of metaphoric language by first getting children to write poetry. The more industrious poets will usually end up compiling booklets of class writings for the teacher and the class. One such poet, Carol Burke, feels strongly about the value of the class anthology of student writings.

> Writing can offer the child a place to freely explore feelings and fantasies, a place to play with words, a place to talk to one's self and to others, a place to comfortably say the impossible ...and to openly speak the uncomfortable ('Blackie was my grandfather, I thought he wouldn't have to die.')[61]

Perhaps the best known of all poets-in-the-schools is Kenneth Koch, author of Wishes Lies and Dreams and Rose, Where Did You Get Your Red? Koch has used a variety of approaches in getting children to experience the language of great poets. In working with poems by Shakespeare, Donne, Herrick, Lorca, and William Carlos Williams, he might have students singing parts of a poem, chanting lines of their own, acting out a line in a poem, or borrowing a single idea from a poem for their own improvisations and intentions with language. And when he reads the children's own poetry back to them, he reads the poems dramatically--as though they were important works of art. He wants the children to witness their language evoking feeling and a sense of importance.[62]

Koch uses great poems to give children ideas about poetic elements that can build tension in their own poetry. For example, he might use William Carlo Williams' poem "Between Walls" in getting children to develop a poem about a subject that appeared ugly but was really beautiful. On the other hand, he might use Wallace Stevens' "Disillusionment of Ten O'Clock" to have students write a poem about what something was not. Frequently he uses

"The Tyger" to help children structure a poem with repeated questions.[63]

Kenneth Koch is the type of poet who is not afraid to share the great authors with children in the elementary schools. He knows that they will not understand everything there is to understand in each poem, but he argues children have the right to experience the language of the authors who adults say are great writers. "Many details of adult poetry are difficult for children, but they are glad to have them explained if they are interested in the poem, and if they aren't made to feel the poem is over their heads."[64]

Koch and others argue that condescension kills children's love for poetry. A common form of condescension appears in terms of poetry selections, either by the textbook or by the teacher. It is the steady diet of the sweet, sing-songy type poem that has probably turned off many children to poetry by the time they are in sixth grade. Many textbook publishing companies and educators believe that there must be total understandability in the language of the poem before it can be used in the classroom. The poets counter with "If there is total familiarity with the language and the concept in the poem, where is there a chance for the children to discover something fresh and new?"[65]

One big difference between the poet and the teacher is that the poet is not afraid if the children at first seem a little unresponsive to poetry. The poet knows that if the class is dull or difficult, it does not mean that the class is really uninterested in poetry. The poet knows how to search for language keys to evoke excitement about poetic language, and he is confident he can find them.

Supportive Environment: Media

To date, research on the effective use of teaching poetry with the use of media is sparse. The most pertinent studies in the application of an external instructional support system are Elizabeth Renee Huettenmueller's A Multi-Sensory Approach to Teaching Poetry to Sixth Grade Students (1973) and Ann Redmond's Children's Response to Metaphor in Poetry (1978).

Huettenmueller investigated the effects of three approaches to the teaching of poetry: one treatment included an oral-aural-visual approach; the second treatment included an oral-aural approach; the third was a control group in which students experienced no additional poetry beyond which was typically taught in the sixth grade curriculum. Her study included 10 sixth grade classrooms for the treatment groups and 5 for the control group. Altogether 393 students were involved in her study.

Students in both treatment groups received a special poetry booklet consisting of nearly 100 poems selected by the investigator. The booklet was arranged in terms of nine lessons, with 10 to 14 poems in each lesson. Over a nine week period, one lesson was taught for two days each week. Students in the control group used the regular reading and language arts texts for their poetry sources.

In the oral-aural-visual treatment, students experienced the printed material, the tape recording, and the visuals simultaneously when studying each poem. Over 227 slides were prepared by the investigator for this treatment. Discussion of the poems came before and after a cluster of poems was experienced in each class period. In the oral-aural approach, pupils experienced the poetry through the combined text and a taped reading. Again, discussion came before and after clusters of poems were experienced during the class period.

The independent variables in Huettenmueller's study were three: (1) mean scores on a single poetry test which had a reliability coefficient of .768, (2) sex, and (3) mean scores on an attitude survey which had a reliability of .959. The test instrument used by Huettenmueller was a 44-item poetry test patterned after "A Look at Literature."[66]

Table 3
POETRY TEST RESPONSES IN THE HUETTENMUELLER STUDY

Condition	Mean	F
Oral-Aural-Visual	16.88	
Oral-Aural	17.05	2.465
Control	18.27	

In an analysis of variance, Huettenmueller found no significant difference among the mean scores of the three groups; however, in a two way analysis of variance between treatment scores and control scores, she did find a difference favoring the control group, significant at the .03 level.

One might assume from these findings that the treatments containing media and the poems selected by Huetenmueller proved less effective than what was done in the control group. However, in a follow-up to her study, Huettenmueller discovered that students had been rearranged by some of the participating schools and this rearrangement may have contaminated her findings. After discovering that some of the brighter students in the treatment groups were transferred for some of the slower students in the control group, Huettenmueller asked the schools for permission to look at the IQ scores of pupils in both groups and found that pupils in the treatment groups had an IQ average of 107.20, whereas pupils in the control groups had an IQ average of 115.04. She also found a positive correlation between scores on the poetry comprehension test and IQ: $r = .89$, significant at the .01 level.

In addition to contamination due to replacement, there may be other factors that make the results of Huettenmueller's findings difficult to interpret.

1. Huettenmueller admits that her selection of poems, especially at the beginning of the study, may have been too simple for the students.
2. Historical influences are not controlled for in her study. No pre-test was administered to determine how much the pupils in each group knew about poetry to begin with.
3. No controls were established for the control group. Huettenmueller's assumption was that teacher's in the control group spent as much time or less time on poetry than the teachers in the experimental groups. Instructional methods, content, and time spent on poetry operates as unknowns for the control aspect of the experiment.
4. It is quite possible that media may have interfered with the pupils' analysis of poetry. The integrity of the language of poetry may become violated with the use of media to interpret the meanings of the poems for the pupils.[67]

5. Also, it is possible that the pupils in the treatment groups received too many poems to analyze. If pupils were expected to interpret six to seven poems within a given session on poetry, one can assume that little time was left for discussion on the language of poetry. Too much time may have been spent on getting children to look at slides and to listen to the poems.

In another study related to oral, aural, and visual cuing in teaching poetry, Sister Ann Redmond (1978) found no significant differences in the mean scores of one group that was taught poetry and another group that was taught grammar. Redmond attributes the lack of difference to the failure of the poetry group to experience the close type of analysis demanded by the objective test.[68]

Sister Redmond's study involved 46 children from a Catholic elementary school in St. Paul, Minnesota. A class of 23 children was assigned as the control group and given grammar. A random selection of 23 children comprised the experimental group, which received treatment two hours a week over a four week period. It should be noted that five children in each group were dropped from the study due to illness or early departure for the Thanksgiving Vacation. Consequently, the final number in each of Redmond's groups was 18.

The children in the experimental group received treatments with media "to strengthen their own sensory perceptions." Students listened to sound-effect records, completed tactile exercises, watched two filmstrips, and read and discussed pictures to prepare for the study of metaphor in poetry. Most important was the class time spent in reading poetry and responding to it. Students had printed copies of 41 poems, which they read silently while the experimenter read them aloud. Each poem was read twice and discussion followed, with students being encouraged to respond freely: "...it was emphasized that there was no right response to any poem."[69]

Following the treatment, both the experimental and the control groups were administered the poetry items in one form of "A Look at Literature Test," and then given an open-ended response test to 10 poems, and an attitude survey. Redmond found no significant differences in all three of the tests.[70]

Table 4
CHILDREN'S RESPONSES TO "A LOOK AT LITERATURE" IN THE REDMOND STUDY

Group	n	Mean	SD	t value
Experimental	(18)	9.17	2.20	.205
Control	(18)	8.39	3.26	

The difference between the experimental and the control group is nearly a point; however, this difference is not statistically significant. The mean score for each group is based on the number of right responses out of a possible score of 15. Each form of "A Look at Literature" contains 15 poetry items.

In a small but tightly controlled study related to the use of media and reading instruction in sixth grade, John Hempstead (1973) found that media presentations using picture and sound and print and sound were more effective than the use of either print or sound alone but not more effective than the use of print and pictures. Sixth grade students from two Madison, Wisconsin middle schools were randomly assigned to one of five media presentations on American Indians. An equal number of boys and girls were in each of the five treatments: print, sound, print and pictures, print and sound, picture and sound. The print matter consisted of scripts from the two filmstrips used in the study. The sound consisted of only the recordings that accompanied the filmstrips. The pictures consisted of only the visual components used in the filmstrip.

Following their exposure to treatment, the students took a 75 item test over the content in the two filmstrips about American Indians. From the results of the test, Hempstead concluded that two channel presentations used for instructing pupils best facilitated recall of factual information.[71]

Table 5
HEMPSTEAD'S FIVE TREATMENTS

Group	n	Mean	CV
Print	(12)	46.385	
Sound	(12)	46.815	
Print and Pictures	(12)	48.827	4.583
Print and Sound	(12)	53.376	
Picture and Sound	(12)	54.045	

In learning situations where the learner is assisted by the visual representation of content, it should be noted that a number of elements may be responsible for the effect upon the learner: vividness of details, richness of details, organization of images, use of the visual in the learning context, degree of acceptable symbolic representation.[72] Regarding all of these elements, Ruch and Levin's study (1977) about the use of "partial pictures" suggests that picture completeness may not be a relevant consideration in the use of pictures with printed prose matter for children of third-grade-age or older. Ruch and Levin implied that pictorial organization and kinds of prose-learning in which pictures are used are likely to be more important considerations. The authors also noted a particular interest in determining if pictures of the kind used in their study (partial pictures) "would facilitate learning of more abstract, though strongly implied, passage content," which is related to the aims of this investigator's study of media and poetry.[73]

Summary and Conclusion

If students are expected to become critical readers of poetry, they must be coached in developing two very basic types of analytical skills. The first basic skill involves the interpretation of poetic elements as metaphoric events. It involves sensing and understanding not only the doubleness of metaphoric images but also "right surprise" in a variety of types of poems. The second basic skill requires the reader to connect major poetic elements in the poem to arrive at a sense for what the poem as a whole is doing and meaning. In short the reader must develop an awareness about the relationship of form to meaning, and that form is a part of meaning.

Findings from the studies by Smith, Brause, and the NAEP suggest that children in the sixth grade are at a very important threshold in developing these two basic skills in reading poetry. However, there is also strong evidence to suggest that they need plenty of coaching from the teacher. Most children in the sixth grade can demonstrate a partial acquisition of these two basic skills, but many of them also demonstrate a dependence on concrete operations to explain metaphor.

There is no doubt that Ann Terry's concern about the selection of poetry for elementary children is important.

But that importance needs to be considered only when one relates selectivity to purpose. *More important than knowing what children prefer is knowing what a teacher can do with the poems and knowing what supportive environments can be created to facilitate the acquisition of poetry reading skills.*

Having poets teach students poetry is one way to create a supportive environment. The unique advantage given by the poets is their insights into the design of metaphoric language in their own poetry and their relatively broad range of experience with many poems. Undoubtedly, poets will encounter some of the same problems that teachers face in teaching poetry; however, because of the unique advantage they have, they are usually better equipped to resolve some of the problems of poetry instruction. Involving the poet provides a unique, internal instructional support system.

It seems very possible that a form of external instructional support can also be provided through the use of media. Hempstead's findings suggested that two channel components do facilitate children's acquisition of recall information. It seems very likely that media components could be designed to facilitate the children's acquisition of interpretations of metaphor. But, to date, no studies indicate this has been done. The two studies by Redmond and Huettenmueller show no positive results favoring the use of media in poetry instruction. However, both studies are important in the sense that they identify some of the pitfalls of media design research in education. A common problem for both studies was the use of a large number of poems, with virtually little time to focus on the analytical skills needed in interpreting poetry. It seems critical that classes not be expected to analyze more than three poems a session and that the selection of poems allow the teacher and the students to investigate the effective use of metaphoric imagery. Any media used in poetry instruction must not get in the way of what is central to the acquisition of interpretive skills. Any media designed for poetry instruction must, without violating the integrity of the poetry being studied, allow the reader to better interpret poetic elements as metaphoric events and/or allow the reader to connect major poetic elements in the poem to arrive at a sense for what the poem is doing.

CHAPTER III METHODOLOGY

In this chapter, the population from which the subjects were drawn, the research design, and procedures are described. Essentially, this chapter is a logging of rationales and techniques employed in this investigation.

Demography and Subjects

All subjects in this study were taken from sixth grade classes in three different school corporations in Tippecanoe County. Tippecanoe County (Indiana) represents a wide variety of occupational, social, and cultural differences. The community is comprised of Lafayette, a manufacturing city which ranks seventh largest in Indiana; West Lafayette, a medium-size, suburban-type city which hosts Purdue University; and nine township districts representing rural communities.

Available to this investigator were 20 teachers, and 720 children in 30 classrooms, which represented 52% of the sixth grade public school population in Tippecanoe County. Through a method of randomization, the investigator limited the number of subjects to 272 in 12 intact classes, with one from each school corporation assigned to each of the four conditions. Three classes were assigned at random to each of the following conditions: Control, with no instruction in poetry; Treatment A, which approached poetry through verbal cuing by the regular teacher; Treatment B, which incorporated media and verbal cuing by the regular teacher; Treatment C, which included verbal cuing by a poet-teacher. The three different treatment groups represent three different methods of instructional support in teaching interpretive skills in poetry. All treatments used the same learning model and drew from the same set of given poems.

Method of Sampling

Before assigning any of the classes to treatment, the investigator stratified the choices for assignment by administering Form A of "A Look at Literature" as a pre-test to a portion of the classes available in each school system. In the largest school corporation, nine teachers and 11 classes were available for the pre-test. The investigator randomly chose six teachers and six classes from the largest corporation. In the second largest corporation, only six teachers and 10 classes were available; the investigator used all six teachers for the pre-test but randomly chose one class of the five assigned to a teacher. In the smallest corporation, only five teachers and eight classes were available; the investigator used all five teachers and randomly selected one of four classes assigned to a teacher. The pre-test was administered to 17 classes in all: six in each of the largest corporations and five in the smallest. On the basis of pre-test scores, four classes within each school corporation were matched and randomly assigned treatment. (See Appendix A for results of matching within school corporations.) The rationale for using this approach was to reduce the possibility of a high standard error of the mean on the post-test, since there was a wide discrepency of student ability expected in each of the three school corporations. At the same time, by keeping the distribution of the three school corporations in each of the treatments, the method of sampling helped to eliminate bias due to socio-economic and cultural backgrounds.

Random selections in all cases were completed by a person drawing a folded two inch square slip of paper on which was written a number, a treatment, a name of a school, or the name of a poet. Someone other than the investigator made all the selections by drawing the slips of paper from a shoe box. After each selection was recorded, the slip of paper was returned to the box for maximizing equalities of drawings.

Design

The independent variable for this study was the method of instructional support. The dependent variables were the raw scores of children's responses to Form B of "A Look at Literature," particularly those responses to items which dealt specifically with the interpretation of metaphoric language in poetry.

Treatments

Of essence in this design is a clear differentiation of methods of instructional support used by each of the treatment groups.

Treatment A was unique in the sense that it had no special external or internal supports. A regular classroom teacher applied his/her own verbal cuing in adapting a given learning model for the analysis of 16 poems.

Treatment B was unique in the sense that the regular classroom teacher received external support from media designed to prime pupils to (a) speculate on the meanings of symbolic images and (b) establish relationships between the contrasting sets of images. On the first day of the treatment, the pupils viewed and discussed possible symbolic meanings of images in 20 slides presented by the teacher. In the following two days of the treatment, the pupils viewed and discussed two 16mm films: "The Hunter in the Forest" and "The Magic Indian," both films incorporating a number of contrasting sets of metaphorical images within a narrative frame.[74] Then, following the discussion of each of the 16 poems used in the treatment, the teacher projected a transparency that was designed to reinforce the notion of tension created through imagery in the given poem. The pupils were asked to determine if the images they saw on the projected transparency were directly related to the images they saw in the poem.[75] (See Appendix B for transparency masters and complete descriptions on the use of media.)

In Treatment C, the method of instructional support was based largely on the internal support provided by the insights and skills of the poet-teacher. The underlying assumption here is that the teacher who is a practicing poet brings to the classroom a unique set of writing experiences and a broad exposure to literature that assist him/her in tracing metaphoric language with children. All three of the poets used in this study were selected on the basis of their national visibility as writers, their experience in the classroom, and their nearness to the project. (See Appendix C for background information about the authors.)

The Control classes received instruction in subject matter other than poetry. One class wrote paragraphs, studied the dictionary, and completed vocabulary drill assignments. Another class read and discussed stories in literature and completed a skill lesson on distinguishing facts from opinions. The third class studied grammar.

Controls in Poetry Instruction

Three weeks before the treatments were to begin, the investigator met with the poets and the teachers to discuss the purpose of the study and the controls that needed to be maintained. Four basic controls were discussed: content, stimuli, time, and learning model.

The Content for each treatment consisted of 16 poems selected from the following set of 24 poems:

"Pete at the Zoo" by Gwendolyn Brooks
"Mummy Slept Late and Daddy Fixed Breakfast" by John Ciardi
"Catalogue" by Rosalie Moore
"Evans" by R. S. Thomas
"Early Warning" by Jared Carter
"The Bagel" by David Ignatow
"The Two-Headed Calf" by Laura Gilpin
"Patterns" by Paul Simon
"Traveling Through the Dark" by William Stafford
"Fueled" by Marcie Hans
"Jake Hates All the Girls" by E. E. Cummings
"Richard Cory" by Edwin Arlington Robinson
"An Easy Decision" by Kenneth Patchen
"The Eagle and the Mole" by Elinor Wylie
"Southbound on the Freeway" by May Swenson
"A Poison Tree" by William Blake
"Silver" by Walter de la Mare
"The Animals Mourn with Eve" by Christina Rossetti
"Bats" by Randall Jarrell
"My Papa's Waltz" by Theodore Roethke
"The Tatoo" by Wallace Stevens

"Out, Out" by Robert Frost
"The Tiger" by William Blake
"Fast Run in the Junkyard" by Jeanette Nichols

Each teacher and poet was allowed to draw 16 poems from the 24 given poems, with the understanding that at least two works had to be chosen from poems by Wyle, Blake, de la Mare, Rossetti, and Robinson and at least two works had to be chosen from the works by Patchen, Stevens, Nichols, Carter, Cummings, and Swenson. The investigator wanted to make certain that in each poetry treatment, pupils had an opportunity to experience the language idioms represented by each set of poets.

It should be noted that children's preferences were not a major factor in the selection of poems. A balance of modern and classical poetry representing the effective use of concrete imagery was the essential aim in the composite of poems.

In arriving at the final 24 poems, the investigator selected 24 poems which he thought would best serve the purpose of the study, and then he gave copies of the poems to six readers, three poets and three sixth grade teachers, who were asked to apply the following criteria in assessing the choices:

1. The poem must make a statement that is translatable to children in sixth grade.

2. The poem must allow for a discovery of tension through a contrast of images, voices, movements, or other events in the poem.
3. The poem must allow for a chaining of metaphoric events that will permit the reader to formulate or re-affirm a generalization about the meaning of the poem.

The teachers and poets were asked to identify those poems which, in their estimation, did not meet the given criteria. If at least one teacher and one poet identified a poem not meeting the criteria, the poem was withdrawn from consideration and another poem was put in its place after the investigator conferred with the readers about the substitution. Six poems in the original list of poems had to be substituted. (See Appendix D for the original selection of poems and the readers' votes.)

The Stimuli common to each treatment were 16 mimeographed poems and verbal cuing. Other stimuli were inherent qualities of the experimental treatments. Treatment B included 20 slides, two films, and 16 transparencies. Treatment C included the presence of a poet.

It should be noted that the investigator had piloted the use of ten poems and 20 slides with two classes six months before the experiment began. None of the classes in the pilot study participated in the experiment. The investigator also tested the use of the two films with more than 1,000 children at various grade levels.

The only visual stimuli not pre-tested with children were the transparencies. In examining the final master copies to be used in making the transparencies, the investigator noted several conceptual flaws. However, rather than make the changes, the investigator chose to leave in the flaws and to study how the children perceived the images on the transparency. Consequently, the investigator devised an evaluation form which children and teachers used in responding to each transparency. This evaluation form itself was also a stimulus for getting children to look more closely at the poetry.

The Time for analyzing the 16 poems in each treatment was essentially the same: eight class periods. Some class periods, however, were 35 minutes in length while others were 55 minutes. The poets and teachers were advised to average 45 minutes per session in the eight day treatment. All treatments were administered within a two week span of time beginning October 30, 1978.

The Learning Model used in each of the poetry treatments was adapted from a model suggested by Collett Dilworth in the February 1977 issue of the English Journal. The model included four phases: Induction, Speculation, Search, and Application. In the Induction phase, the teacher prepared the pupils to receive the poem through a variety of optional ways. In the Speculation phase, the teacher read the poem to the class and invited the children to speculate on the meaning of the poem: "What do you think this poem is about?" In the Search phase, the teacher and the pupils went back into the poem to analyze key language events. In the Application phase, the teacher guided the children in chaining their interpretations of key metaphoric events to a generalization about the meaning or the intent of the poem.

To assess the application of the model, the investigator requested the poets and teachers to maintain a log of their lessons. Following the post-tests, the investigator met with the teachers and the poets to discuss the application of the model to the lessons for the poems and to collect the teachers' and poets' logs. (See Appendix E for sample page used in logging lesson plans.)

Instruments

The major instrument was "A Look at Literature." However, following cues by Huettenmueller (1973), Redmond (1978), and the publisher of the test, the investigator felt it was necessary to pre-select items that dealt specifically with children's interpretations of metaphoric imagery in poetry and to use those items as a special instrument of response: the "11 Critical Items Measurement." Ancillary to the purposes of this study was another instrument: a specially designed scale for determining children's responses to the transparencies used in the media treatment.

"A Look at Literature"

"A Look at Literature: the NCTE Cooperative Test of Critical Reading and Appreciation" was given two favorable reviews in Oscar Buros' The Seventh Mental Measurements Yearbook, Volume I (1972) and was adapted or used by other investigators of children's response to metaphoric language: Smith (1973), Huettenmueller (1973), and Redmond (1978). It is a multiple choice test with two forms. Each form consists of two parts: Part I is given by a test administrator reading aloud to the students while the students read along silently and then mark their responses. Part II of each form involves the students in reading the test silently and then marking their responses. Each section of the test takes approximately 35 minutes to administer; however, the test is untimed.

"A Look at Literature" was used in this study because it was the best available instrument to objectively measure a wide range of interpretive skills in reading imaginative literature. The response modes for selections in the entire test call for such operations as valuing, comparing, inferring, appreciating, restating, attending to, relating, identifying with, and understanding.

Regarding the content validity of the instrument: The Trustees of the Research Foundation of the National Council of Teachers of English commissioned the development of a test that would measure critical reading and literary appreciation. A committee of teachers, librarians, and specialists in literature for children designed the early stages of a test they felt could be read and appreciated by children in grades 4, 5, and 6. Further refinement of the test by Educational Testing Service made possible the final forms of the instrument.

Regarding the reliability of the instrument: The Kuder-Richardson Formula 20 was used to estimate the internal consistency of the test. The reliability for _Form A_ and _Form B_ was .83. Both test forms include 50 test items.

Both forms of "A Look at Literature" were administered by the classroom teachers, who received special written instructions on the administration of the test. _Form A_ of the test was used a month before treatments as a screening instrument with 408 children in 17 classrooms. The four classes with the most compatible scores in each school corporation were used for random assignment. The purposes in using _Form A_ as a screening device were: (a) to avoid the problems in using gain scores, (b) to reduce the possibility of a high standard error of the mean, (c) to collect historical data on subjects within the treatments. Regarding the avoidance of problems in using gain scores, the investigator was sensitive to three possible problems occurring: the ceiling effect, regression, and unequal units of measurements.[76]

Form B of "A Look at Literature" was administered one or two days after the final day of treatment. All treatments completed the post-tests within the same four day period.

"11 Critical Items Measurements"

Since some but not all the items in "A Look at Literature" were germane to the primary issues in this study, the investigator devised another measure from the given items: "The 11 Critical Items Measurement." In each form of "A Look at Literature," only 15 items pertain to the analysis of poetry. Not all of these items are relevant to an analysis of how children respond to metaphoric language, however. Before any of the treatments began, the investigator collaborated with two scholars of literature, both poets and editors unrelated to the treatments, and identified in each form of "A Look at Literature" 11 items that were most relevant to measuring how well children interpreted metaphoric events in poetry. (See Appendix F for rationales in selecting each item.) Using the Kuder-Richardson Formula 20, the investigator found that the reliability coefficients for both forms of the "11 Critical Items Measurement" were .60. This coefficient was significant at the .05 level, with N-2 degrees of freedom (9).

Evaluation Form for Transparencies

The children and their teachers in the media treatment were asked to evaluate each transparency, using the form in *Figure 1*. After showing the transparency to the class and discussing its relationship to the poem, each teacher in *Treatment B* had her pupils evaluate the relatedness of the transparency to the images in the poem being discussed. The pupils had to identify the poem, circle the number which best corresponded with their analysis, and write one sentence explaining their response. Each teacher filled out separate forms *before* and *after* showing the transparency to the class.

Poem: ______________________________

The pictures on the transparency were directly related to the poem.

7	6	5	4	3	2	1
Strongly Agree	Agree	Mildly Agree	Neutral	Mildly Dis-agree	Disagree	Strongly Agree

Please write one sentence to tell why you feel this way:

____

____

Figure 1
EVALUATION FORM FOR TRANSPARENCIES

Statistical Procedures

After Form B of "A Look at Literature" was completed by all the subjects, the investigator hand-scored all answer sheets and recorded both the total test score and the "11 Critical Items Measurement" score for each subject. Two other readers checked the scoring of the answer sheets for errors. Answer sheets belonging to subjects who were not present for at least half the treatment were withdrawn from the study. Only one child was absent at least half the time.

For each treatment, the mean scores from Form B of "A Look at Literature" and the "11 Critical Items Measurement" were computed for an analysis of variance with each measurement. To arrive at equal n's (n=68), the investigator applied the method of randomization described earlier and withdrew one score from Treatment A (n=69), one score from Treatment C (n=69), and four scores from Treatment D, the Control Group (n=72). Treatment B had only 68 children; consequently, the other treatments had to be trimmed to meet the maximum number.

An analysis of variance was used to determine if there was any significant difference between variances within and between treatment groups. Since this was a multiple-treatment comparison, the analysis of variance was very appropriate.

Following the analysis of variance, the investigator probed for differences in the relationships among the treatment means by using both the Newman-Keuls and the Dunnett T Statistic. The application of Dunnett's T Statistic allowed the investigator to describe the treatment effects in terms of statistically significant mean variations from the mean score of the Control Group, rather than by direct comparisons of the treatment means.

The alpha level established for the Newman-Keuls was .05, since the test is relatively conservative. The alpha level established for the less conservative Dunnett T Statistic, however, was established at .01.

Null Hypotheses

1. There will be no significant differences among treatments in pupils' application of a wide range of critical reading skills in interpreting imaginative prose and poetry.
2. There will be no significant differences among treatments in pupils' application of specific reading skills for interpreting metaphoric language in poetry.
3. There will be no significant differences between the treatment means of pupils whose teachers received special external instrutional support (media) and those whose teachers received no special internal or external instructional support.

4. There will no no significant differences between the treatment means of pupils whose teachers had special internal instructional support (poets) and those whose teachers received no special internal or external support.
5. There will be no significant differences between the treatment means of pupils whose teachers received special external instructional support (media) and those whose teachers had special internal support (poets).
6. There will be no significant differences among scores of pupils in the Control Group and those in the three poetry-instruction groups.

CHAPTER IV RESULTS AND FINDINGS

The aim of this experimental study was to examine the effects of three different instructional support systems in teaching poetry to sixth grade children.

A. The standard support system involved teachers relying on their own verbal cuing.

B. A second system involving external instructional support, operated with teachers relying not only on their own verbal cuing but also on selected media.

C. A third support system used poets relying on their own verbal cuing.

External instructional support was provided in Treatment B through the use of media. Internal instructional support was provided in Treatment C through the use of poets. Treatment A had no unique internal or external instructional support.

For the purpose of comparing the effect of treatments, the investigator also examined the responses from a group of children who received no instruction in poetic imagery. This group shall be referred to as Treatment D, or the Control Group.

Two major types of comparisons are reported in this chapter: a comparison of responses to the entire test of "A Look at Literature" and a comparison of responses to only those items most critical in determining children's understanding of metaphoric language in poetry. Both the pre-test and the post-test scores are included in these comparisons. Ancillary data regarding teachers' and children's responses to images used with transparencies have also been added.

A Comparison of Pre-test Scores

Form A of "A Look at Literature" was administered to all groups approximately one month before treatments began. The test measures a relatively broad range of critical reading skills including definitions, low-level inferences, restatements, interpretations, predictions, direct translations of meanings, and a perception of style for both imaginative prose and poetry. A total of 50 points was possible on this test.

An examination of the pre-test scores in Table 6 shows a relatively narrow range of means. Treatment B recorded the highest number of correct responses, averaging 30.24 per pupil. The lowest score was Treatment C with a mean of 28.34. Using an analysis of variance technique, the investigator observed no significant differences among treatment means. The observed value

Table 6
"A LOOK AT LITERATURE" PRE-TEST RESULTS

Treatment	n=68 A	n=68 B	n=68 C	n=68 D
Total Raw Score	1942	2056	1927	2004
Squares Summed	59342	69092	59219	64354
Mean	28.56	30.24	28.34	29.47

Analysis of Variance Summary

Source	SS	df	MS	F
Treatments	155.66	3	51.8867	.6713 NS
Error	20715.16	268	77.2954	
Total	20870.82	271		

$F_{.95}$ (3,268) = 2.60

of F would have to be greater than 2.60 for the differences to be significant at the .05 level.

The investigator also observed no significant differences among treatments in an analysis of responses to the 11 critical items dealing with the interpretation of metaphoric language in poetry. In comparing the total raw scores for each treatment in Table 7, one can observe that the largest point spread between any two treatments is 13 points. The largest difference between any two means is slightly less than two tenths of a point. The highest possible score on this measurement was 11. An analysis of variance for the pre-test scores indicates no significant differences among treatments.

In a special probe for differences which might be attributed to sex, the investigator observed no significant differences. On the pre-test for the "11 Critical Items Measurement," the boys scored 6.04, and the girls scored 6.25. Other data on pre-test and post-test scorings by sex are given in Appendix G.

After examining the pre-test data, this investigator concluded that the differences among treatments were not statistically significant and that all four treatments were basically at the same level of performance in the pupils' responding to literature and interpreting metaphoric language in poetry.

Table 7
"11 CRITICAL ITEMS MEASUREMENT" PRE-TEST RESULTS

Treatment	n=68 A	n=68 B	n=68 C	n=68 D
Total Raw Score	408	417	413	405
Squares Summed	2752	2957	2865	2769
Mean	5.94	6.13	6.07	5.96

Analysis of Variance Summary

Source	SS	df	MS	F
Treatments	1.7464	3	.58213	.1065 NS
Error	1465.0735	268	5.4669	
Total	1466.8199	27.		

$F_{.95}$ (3,268) = 2.60

A Comparison of Post-Test Scores

Form B of "A Look at Literature" was administered as the post-test shortly after treatment to all groups. Pupils in Treatment B recorded the highest number of correct responses, averaging 30.15. The lowest score was by Treatment A, with a mean of 27.51. However, in an analysis of variance of the treatment scores, the investigator once again found no significant differences, indicating the differences within the treatments were greater than those differences between treatments.

Table 8 shows an observed F value of 1.1195. For the differences to be significant at $F_{.95}$ (3,268), the observed value of the F test must be 2.60 or higher.

The results of this test suggest there are no differences due to treatment in the children's application of a wide range of critical reading skills. The results of another measure, the "11 Critical Items Measurement," however, suggest there are differences in the children's responses to metaphorical interpretations in poetry.

In examining the responses to the poetry items in the "11 Most Critical Items Measurement," the investigator noted significant differences at the .01 level. Table 9 shows that Treatment C, the poet treatment, reported the highest mean, 6.75. The lowest was Treatment A, 5.51.

Table 8
"A LOOK AT LITERATURE" POST-TEST RESULTS

	n=68	n=68	n=68	n=68
Treatment	A	B	C	D
Total Raw Score	1871	2050	1973	1940
Squares Summed	56127	67286	61715	60204
Mean	27.51	30.15	29.01	28.53

Analysis of Variance Summary

Source	SS	df	MS	F
Treatments	243.8388	3	81.2796	1.1195 NS
Error	19457.4402	268	72.6024	
Total	19701.2790	271		

$F_{.95}$ (3,268) = 2.60

Table 9
"11 CRITICAL ITEMS MEASUREMENT" POST-TEST RESULTS

Treatment	n=68 A Teachers	n=68 B Teachers and Media	n=68 C Poets	n=68 D Control Group
Total Raw Score	375	451	459	435
Squares Summed	2351	3368	3586	3137
Mean	5.51	6.63	6.75	6.40

Analysis of Variance Summary

Source	SS	df	MS	F
Treatments	63.7054	3	21.2351	3.7984**
Error	1501.8240	268	5.6038	
Total	1565.5294	271		

$F_{.95}$ (3,268) = 2.60; $F_{.99}$ (3,268) = 3.78

The critical values of $F_{.95}$ and $F_{.99}$ at (3,268) degrees of freedom are 2.60 and 3.78, respectively. Since the observed F value of the statistical test was 3.7894, one can assume that the differences among the treatments are due very likely to treatment effects rather than to chance.

As a follow-up to the findings in Table 9, the investigator probed for differences among the treatment scores, applying the Newman-Keuls Test. In Table 10, one can observe a clear differentiation between two sets of treatments. The table shows that the differences between Treatment A and B and between Treatments A and C are significant at the .05 level. The table also shows that the differences in all other comparisons of treatments are not significant. These differences are represented by the simple graphic in Figure 2.

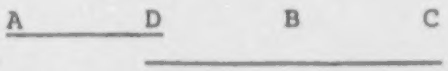

Figure 2
A COMPARISON OF SIGNIFICANT DIFFERENCES AMONG TREATMENTS

The treatments underlined by a common line do not differ from each other. The treatments not underlined do differ. Accordingly, no significant differences were observed between Treatments A and D, the teacher and the control groups. Furthermore, no significant differences were observed among Treatments D, B, and C, the control,

Table 10
NEWMAN-KEULS TEST FOR DIFFERENCES AMONG TREATMENTS IN THE "11 CRITICAL ITEMS MEASUREMENT"

Order	1	2	3	4
Treatment in order of total score	A	D	B	C

Score	375	435	451	459	r	$q_{.95}\sqrt{n \text{ MS error}}$
Treatment	A	D	B	C		
A	—	60	76	84----	4	---70.86
D		—	16	24----	3	---64.61
B			—	8----	2	---54.07

Truncated range r	2	3	4	
$q_{.95}$ (r, 268)	2.77	3.31	3.63	
$q_{.95}$ (r, 268) $\sqrt{n \text{ MS error}}$	54.07	64.61	70.86	
	A	D	B	C
A			**	**
D				

media, and poet groups. Later in this chapter, the investigator will attempt to delineate important aspects of each poetry instruction group in order to arrive at possible causes for the differences between Treatment A and Treatments B and C.

The data in Table 10 represents comparisons of all ranked pairs of treatments on the basis of each treatment's total raw score for the "11 Critical Items Measurement." The MS error for the q statistic is found in Table 9: 5.6038. When multiplied by the n (68) for each group, the square root of that sum is 19.52. This value is multiplied by the value of the given truncated range rank to arrive at the q statistic for each row of scores. The only row of scores yielding any significant differences is the first row, which compares the fourth ranked score (Treatment A) to the other treatment scores. Only two scores in this row are higher than the value of 70.86; the Treatment D score is only 60 and is not significant. The asterisks at the bottom of the table indicate that significant differences at the .05 level were observed between Treatments A and B and between A and C. These findings clearly show that the children who experienced the two methods of instructional support responded with scores higher than those children who had no unique method of instructional support.

The investigator's application of other statistical tests at lower alpha levels yields comparable results. Isolating the poetry-instruction groups from the Control Group, the investigator completed an analysis of variance and then applied the MS error in this analysis to the Dunnett T Statistic for a comparison of means. Since the Dunnett T Statistic is generally a less conservative statistic than the Newman-Keuls, the level of significance for the Dunnett T was established at the .01 level for a one-sided test.

In Table 11, Treatment A is labeled as the "Standard System" and Treatments B and C are labeled as "Support Systems I and II," respectively. Since the observed F value of 5.5368 exceeds the established value of $F_{.99}$ at (2,201) degrees of freedom, the differences are significant at the .01 level in the analysis of variance for the three treatments.

The formula for Dunnett's T Statistic is as follows:

$$T = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{2 \text{ MS error}/n}}$$

The MS error in this case is the 5.709 found in the analysis of variance summary in Table 11. Since the critical value for Dunnett's T Statistic is associated with two tests, the degrees of freedom are 201. Thus the critical value for $t_{.99}$ in a one-sided test for each

Table 11
A COMPARISON OF THREE SUPPORT SYSTEMS

System Type:	n=68 Standard System	n=68 Support System I	n=68 Support System II
Total Raw Score	375	451	459
Squares Summed	2351	3368	3586
Mean	5.51	6.63	6.75

Analysis of Variance Summary

Source	SS	df	MS	F
Treatments	63.22	2	31.61	5.5368**
Error	1147.54	201	5.709	
Total	1210.76	203		

$F_{.95}$ (2,201) = 3.04; $F_{.99}$ (2,201) = 4.71

comparison is 2.56. The investigator chose to use the Dunnett T rather than another t statistic because the mean score differences were limited by the "11 Critical Items Measurement."[77]

When comparing the mean of the Standard System to the mean of Support System I, the investigator observed a value of 2.73 in the application of the formula for the Dunnett T. When comparing the Standard System mean to the Support System II mean, the investigator observed a value of 3.02. Since both observed values are greater than the established t of 2.56, the differences in both comparisons are significant at the .01 level.

Using both the Newman-Keuls and the Dunnett T Statistic allows the reader to choose between a relatively conservative statistic and a less conservative one established at a lower alpha level. Both allow the reader to arrive at the same conclusion, each through a different format.

Interpreting the Differences

The findings reported in the first part of this chapter clearly show that there were no significant differences among treatments in the pre-test scores but that there were significant differences among treatments in the post-test scores which dealt specifically with children's responses to metaphoric language in poetry. As a result of the differences among the poetry instruction groups, the investigator must raise the following questions. What is the meaning of the differences among Treatments A, B, and C? Is the difference of one point between two treatments an important difference in this case? What evidence is there that the differences can be attributed to unique traits in the method of instructional support used by each treatment group?

Meaning of the Differences

The differences among treatments suggest that an instructional system with external support through media or an instructional system with internal support through a poet provides children with an advantage in learning how to interpret metaphoric language in poetry. The extent of the advantage, however, is not really clear. Treatments B and C each scored slightly more than one point over the mean score of Treatment A. Any advantage may appear to be slight. Before drawing any conclusion, the reader needs to consider the following aspects of the measurement.

1. The test itself measured the children's application of interpretive skills in reading poetry. The test is not merely a measurement of what children have learned about poetry they studied. Any advantage in demonstrating an ability to transfer learning might be an important advantage.

2. There were many limitations which militate against finding large quantitative differences among treatments. Having available only 11 items in the measurement is the most obvious limitation. However, another limitation which is not so obvious is the scope of poetry types found on the test. The test covered only lyrical and humorous rhyming verse. The pupils in each treatment were exposed to rhyming as well as non-rhyming verse, and they had an exposure to many more types of poetry with a variety of idioms. More differences might have been observed if a greater representation of poetry types had been included in a longer test.

Considering these aspects of the test, the investigator is prompted to conclude that the differences among treatments may be actually greater than is suggested by the differences in the mean scores. However, such a decision would be spurious unless more valid evidence were provided.

In the next section of this paper, an attempt will be made to delineate unique traits observed in each of the treatments, so the reader can formulate his own opinion about the extent of the differences.

A Comparison of Three Treatments' Applications of ISSA

All three treatments used the same instructional approach model which included four stages: Induction, Speculation, Search, and Application. To some extent, the investigator can describe how the teachers in each treatment applied the model in the teaching of poetry. By comparing what teachers and poets did similarly and differently in the Induction, Search, and Application stages of the model, one might arrive at an understanding of causes for statistical differences due to treatment. Information about the teachers' and poets' application of the model was gathered from two sources: the written records from each teacher's/poet's notebook and a probe workshop conducted after the post-tests had been administered.

In the Induction Stage, one of the most obvious differences among treatments was that the teachers of Treatment B used two films and a set of slides to prepare pupils to identify and to interpret symbolic images in poetry. During the first three days of the treatment, all teachers in Treatment B used media to prime children to interpret visual images as symbolic events. Notations in the teachers' records and unsolicited remarks from all three of the teachers suggest that the children were very responsive to the given media. (See Appendix B for full descriptions of the media and scripts.)

Outside the use of given media, the teachers in Treatment B worked with the induction stage much the same way teachers in Treatment A worked with it. Teachers in both treatments asked leading questions, gave definitions of words, had students look up definitions, or gave a short writing assignment to prepare the students to receive the poems. For example, before discussing the poem "Catalogue," one teacher involved her class in answering this question: "Do you think different animals have different personalities?" Another teacher had pupils look up the definitions for simile, metaphor, and personifications, three figures of speech the class would be discussing in their analysis of the poem. A third teacher read aloud a poem by T. S. Eliot as a lead-in to the class's discussion of "Catalogue." Another teacher had the pupils list ten words that described a cat and attempted to link the class's previous discussion of William Blake's "The Tiger" to "Catalogue."

In a number of instances, teachers in Treatments A and B recorded their comments on the effectiveness of the activities in the induction stage.

1. "Students were very interested in our discussion on predestination before discussing Paul Simon's 'Patterns.' We brought out how the notion of predestination was linked to some of the early Greek myths."

2. "Before discussing Carter's 'Early Warning,' we talked about various signs of the weather; then I told the class to listen for signs of the weather in the poem. I wanted them to make a link between sign and prophecy."
3. "We had a good discussion about the goodness and badness of being a freak before discussing Gilpin's 'The Two-Headed Calf.' This was one of our best discussions."
4. "I told the students a lot about Paul Simon and the types of poems and songs he wrote. They seemed very interested."
5. "Before discussing 'Patterns,' we played a group game of 'Name It.' The class loved it. Each student did some pattern and the class was asked to identify it."
6. "Before discussing 'The Tatoo,' we discussed the how and why of tatoos, most common pictures of tatoos, and types of people who wore tatoos. We also had a search team look up the actual process of having a tatoo put on. A blah poem according to the class!"
7. "I had the students write about an accident that happened to them and what could have been prevented for the accident not to happen. Then each student was to draw a symbol to remind them

> not to make the same mistake. We did this
> before discussing Robert Frost's 'Out, Out.'"

If there was any trend in the Induction phase of the teachers treatments, it appeared in terms of referential activities and serious questions related to the theme of the poems. Invariably, the teacher asked the children to look up the meanings of given words or introduced a poem with questions such as these:

"An Easy Decision": What makes a truly happy family?

"Bats": Have you ever watched another animal caring for her young? If so, can you make any comparison between it and your own mother?

"Traveling Through the Dark": Have you ever seen a large dead animal along a road? What were your feelings?

"My Papa's Waltz": Is it possible to love your father even though he may do things you don't like?

"Richard Cory": If you had all the wealth you wanted, would you be happy?

The poets did many things that the teachers did; however, they rarely began their discussions of a poem with a serious question related to the theme, and they never had children learn the meanings of metaphor, simile, and personification by looking up the meanings of the words or by writing down the definitions given. All three of the poets placed a heavy priority on activities which led the children to experience certain language events in the poems.

To get at the concept of personification in the poem "Silver," one of the poets, before even showing the class the poem, had the children identify many human characteristics they might use if they were asked to make the moon appear as a person. She filled the chalkboard with the children's responses. Then she had each child select anything in the universe about which to write a personification. This poet had children doing many writing assignments before the class discussed the poems--and all the writing assignments were related to language concepts in the poems to be studied.

Another poet spent time preparing the children to experience the poem through acting out imaginary events. Before discussing "An Easy Decision," for example, he had the children stroll around the room to imagine they were going out for a walk, just like the speaker of the poem was out for a walk. This poet was trying to place the children in the physical presence of the poem before they began discussing it.

On occasion, the poets brought to the classroom an item related to some experience with the poem. Before discussing David Ignatow's "The Bagel," for example, two of the poets brought bagels into the classroom so the children who were not familiar with bagels could see and taste them. One poet in particular brought to class a variety of items to lead the children from concrete referents to concepts about poetic elements. Before talking about riddle poems such as May Swenson's "Southbound on the Freeway," he brought to class a number of visual puzzles for the class to figure out. He talked about puzzles and punch lines in jokes and related the two to riddle-like poems and pivot lines in poetry.

A commonality in Treatments B and C was that the children in both groups experienced exploratory types of activities in the induction stage: Treatment B through media during the first three days of treatment, Treatment C through a variety of experiential activities involving writing, acting, tasting, seeing, and puzzle-solving. Nearly all of the induction activities for Treatment A were referential types.

In the Search Stage for all treatments, teachers and poets focused on many of the same key elements of the poems. Often the same images and the same questions were singled out as key discussion items. Again, the major difference between the teachers and the poets appeared to be that the poets used more questions and activities which guided the pupils in experiencing the poem, whereas the teachers in some cases asked questions that pre-empted experience. For example, most teachers in Treatments A and B asked questions such as these: What feelings are evident in this poem? What are the speaker's feelings? What are the key symbols? What figure of speech do you find in this stanza? In two or three sentences, what could you say the poet is saying? Poets, on the other hand, involved the class in more questions such as these:

What sounds do you hear repeated in lines three and four of the poem? Who can stand up and look "symmetrical"? As I read the poem again (this time in a robot-like voice), tell me who the speaker of the poem is.

In the search stage, poets often were able to lead their pupils to perceptive observations about metaphoric operations in poetry. In teaching Wallace Stevens' "The Tatoo," a relatively difficult poem for anyone to teach, two of the poets were able to get their children to see the inside/outside motif. One poet approached the search with this question: "If we were to imagine traveling through this poem, from a beginning, through a middle, and to an end, where would we travel? At what points would we be inside and at what points would we be outside?"

That same teacher asked the class to consider the poet's use of "rafters" in the second stanza: Why "rafters"? She received the following reply from a pupil: "Because they look like the bones of a building."

The Tatoo

by Wallace Stevens

The light is like a spider
It crawls over the water.
It crawls over the edges of the snow.
It crawls under your eyelids.
And spreads its webs there--
Its two webs.

The webs of your eyes
Are fastened
To the flesh and bones of you
As rafters or grass.

There are filaments of your eyes
On the surface of the water
And in the edges of the snow.

Another poet who taught this poem was able to get the class to discover the meaning of the spider web metaphor in terms of "a plastic relationship" between the events outside man and the events within man. This poet tried to get the children to experience the meaning of the poem and to visualize the events: "Close your eyes and imagine the 'light like a spider' crawling over the water and the edges of the snow. Can you see it growing under your eyelids? Does it seem real?" A pupil responded with: "When you look at the sun on the water and then close your eyes, it makes you squint and you see these web-like things in your eyes." The poet led the class to see that the events outside the person eventually become the events inside the person, like a writer trying to build a story after carrying around the events and the characters of the story within himself--like the character in David Ignatow's "The Bagel," the speaker of the poem who eventually becomes the bagel.

From the spoken and written comments by the poets and the teachers, it was apparent that the poets, because of their involvement with the craft, had formulated language constructs that were not really observed in the types of verbal cuing administered by the teachers in Treatments A and B. The poets seemed to be caught up with the dynamics of interchange in discussing levels of meaning, frequently shifting from the literal through the experiential, to the symbolic, and back to the literal, and onto the symbolic, constantly weaving webs of meaning based on experience. Teachers were invariably on target with the key elements in the poems, but frequently their search approaches were based on referential guidance, always directing, frequently limiting, and sometimes telling the response.

In the Application Stage, poets and teachers again carried out many activities that were very similar. Both had children write paragraphs or poems, listen to other poems for purposes of comparison, compare a particular image or theme in one poem to an image or theme in a poem discussed previously, and interpret titles of poems.

Some examples of what the poets did in this stage of the instructional model are as follows.

1. "Near the end of the treatment, I had students give ideas for completing lines of a poem I was working on. It was interesting to see that some of them applied the concepts about rhythm that we had been discussing in class."
2. "After reading and discussing 'Richard Cory,' I told the class to ask their parents about Richard Cory's possible motive for committing suicide. Many of the kids went home and discussed the poems with their parents that evening and

came back with new speculations about why Cory shot himself. I hoped the kids would see the asking of questions was more important than the answering in this case."

3. "Our discussion of David Ignatow's 'The Bagel' ended with a large lesson learned in a small but significant way. I call it the reader as bagel, or the poet as bagel, and the reader as lox. Anyway, they experienced the organic relationship between poem and poet, poem and reader when things are working. And besides we laughed a lot."
4. After the class had read and discussed "Out, Out," "Richard Cory," "Traveling Through the Dark," "Two-Headed Calf," and "Evans," one of the poets involved the children in discussing the different types of death referred to in each of the poems.
5. One poet spent a considerable amount of time responding to imaginative writings from the pupils. Near the end of the treatment, she duplicated a collection of writing from the class and gave each pupil a copy.

Overall, what could be observed from the notes prepared by the poets was that a special effort was made to get children to synthesize poetic elements operating within a single poem or within several poems. Frequent comparisons of images, movements, and sounds were common in the Application Stage during the poet treatments.

Listed below are sample activities found in the Application Stage for poems in Treatments A and B, the two teacher-directed treatments.

1. "After reading 'The Eagle and the Mole,' we applied the meaning of the poem to the saying 'What is one man's poison is another man's meat.'"
2. "The kids became very intense in discussing 'Traveling Through the Dark'; afterwards we discussed the meanings of different kinds of death."
3. "After reading 'Richard Cory,' the students wrote a paragraph speculating on the reasons for Cory's death."
4. "After discussing 'Jake Hates all the Girls,' we discussed our own likes and dislikes about people, and then I had the students write one stanza, using their own names and identifying their likes and dislikes about members of the opposite sex."
5. "We ended 'Patterns' with a group art experience. Students were equipped with brushes, paint, and paper. The leader of the group made a stroke with the paint brush, and each person had to duplicate

the stroke on his paper. Then another was leader, and each person had to follow him. Each person had an opportunity to be the leader in establishing a pattern."

6. "After reading 'The Tiger' and 'Catalogue,' students reported observations about differences in the moods of the two poems. They realized the power, the forcefulness in 'The Tiger' that was not really evident in 'Catalogue.'"
7. "After reading 'My Papa's Waltz,' I had the students draw pictures which symbolized the relationship among members of their family."
8. "We identified a common conflict in 'Fueled' and 'Early Warning': God vs. Man's Inventions."
9. "After reading and discussing 'Early Warning,' students enjoyed telling some hearsay stories about tornadoes defeathering chickens."
10. "We talked about the importance of a good self-concept after reading 'Jake Hates all the Girls.'"

A unique feature in the Application Stage for the children and the teachers in Treatment B was the use of transparencies. On each transparency were two images which suggested the tension implied in the poem. The pupils were asked to examine each transparency and to determine if the visual images on the transparency were related to the meaning of the poem. The children rated each transparency and gave reasons for their choices. Each teacher rated the transparencies before and after the class had examined them.

The transparencies were used in the Application Stage for the following purposes:

a. to provide an opportunity for the children to experience tension related to the poems,

b. to reinforce the pupils' understanding of the poems,

c. to find out to what extent children were interpreting the visual images as symbolic rather than as literal events, and

d. to determine if the teachers' responses and the children's responses were generally the same.

The transparencies were designed by the investigator and an artist. A major conceptual flaw was observed in one of the transparency masters, but was intentionally left unchanged. The investigator wanted to study the responses to the transparency to find out how the observers interpreted the conceptual flaw. The results of this phase of the study provided important data about children's and teachers' responses to visual images and are included in the major portion of the text rather than in the Appendix.

Collapsing the seven-item rating scale to just three categories of response to the transparencies, the investigator found that most of the children agreed with the statement that the images on the transparencies were related to the meanings of the poems. However, a fair percentage of pupils disagreed with the statement or remained neutral. By examining the reasons the children gave for their responses, the investigator was able to identify trends which suggested to what extent children in sixth grade interpreted the images symbolically.

Table 12 on the next page identifies the poem, the number of children responding to the transparency, the percentage of children whose responses agreed, disagreed or remained neutral to the statement, and the average score based on five points for agreeing, three points for remanining neutral, and one point for disagreeing. The different *n's* for each poem in Table 12 are attributed to the fact that each class in the treatment analyzed only 16 of the 24 poems, and on some occasions pupils were absent.

In examining over 1,000 reasons given for student ratings, the investigator found that, in most cases, children who rated the transparencies low made statements to suggest that they expected the transparencies to represent the poems more literally. Conversely, most statements made by children who rated the transparencies high indicated a willingness to accept the symbolic values of the images on the transparencies to be in harmony with the symbolic

Table 12
CHILDREN'S RESPONSES TO TRANSPARENCIES

Points:		5	3	1	
Poem	n	Agree %	Neutral %	Disagree %	Average
Pete...Zoo	41	71	7	22	3.97
Mummy Slept...	68	75	15	10	4.29
Catalogue	65	83	6	11	4.29
Evans	22	32	23	45	2.73
Early Warning	65	20	9	71	1.98
The Bagel	49	73	8	19	4.10
Two-Headed...	21	38	43	39	3.38
Patterns	40	68	19	13	3.90
Traveling...	64	44	17	39	3.95
Fueled	21	57	14	29	3.57
Jake Hates...	61	74	13	13	4.21
Richard Cory	44	39	25	36	3.05
An Easy...	64	81	8	11	4.41
The Eagle...	43	79	14	7	4.44
Southbound...	42	81	12	7	4.48
A Poison Tree	36	72	8	20	4.06
Silver	24	71	17	12	4.17
The Animals...	41	54	15	31	3.44
Bats	62	48	19	33	3.32
My Papa's...	41	44	20	36	3.15
The Tatoo	24	71	8	21	4.00
Out, Out	19	47	16	37	3.21
The Tiger	42	70	9	21	3.95
Fast Run...	43	33	23	44	2.77

values found in the poem. Below are selected comments which typify the differences in responses from the high-raters and the low-raters. (See Appendices B and D for poems and transparency masters.)

1. "Bats

   High-rater: "Because a bat cares for her baby. It shows caring (that a bat can not only look fierce but also show love)."

   Low-rater: "They are not hanging upside down on a branch."

2. "My Papa's Waltz"

   High-rater: "It shows that the boy and the man are having fun and the bottle represents an unhappy family or a pressured family."

   Low-rater: "It doesn't show the father beating the child."

3. "Out, Out"

   High-rater: "It shows a boy at heart but the saw represents a boy growing up too fast."

   Low-rater: "It needs to show his hand off."

4. "Traveling Through the Dark"

   High-rater: "It shows life that was once there is now gone--it shows something to love and nothing to love."

   Low-rater: "It looked like it laid down to sleep in a comfortable position."

5. "Jake Hates all the Girls"

   High-rater: "It shows a green girl, a fat one, and a skinny one. It's so ridiculous, it fits."

   Low-rater: "It really doesn't show it because there are no boys."

6. "The Bagel"

High-rater: "The man seems parallel to the bagel. Life is a long, hard road, sometimes annoying things can set you free for awhile."

Low-rater: "The bagel is too big."

7. "A Poison Tree"

High-rater: "It's like Adam and Eve."

Low-rater: "His enemy was a human, not a snake."

8. "An Easy Decision"

High-rater: "The top picture is when parents care enough to do something for the kids and the other could care less."

Low-rater: "Not the right number of kids on them."

9. "Catalogue"

High-rater: "A burglar and a cat are something alike."

Low-rater: "My cats don't act that way."

10. "The Two-Headed Calf"

High-rater: "The old-fashioned museum may signify that freaks shouldn't live in an old-fashioned idea."

Low-rater: "The cow doesn't have any newspapers around him."

The dichotomizing of responses is, of course, an over-simplification of what was observed. In some cases, the investigator observed that a high rating or a low rating was given for a reason irrelevant to the task: "I would like to write a poem like this" or "I hate cats." In some cases, pupils gave low ratings for the transparencies but indicated a clear understanding of the symbolic images in the poems. In other cases, pupils gave high ratings but indicated a dependency on literal interpretations of the images on the transparencies. All that is being reported here is the observed trends in student and teacher responses to the transparencies.

Generally, the teachers in Treatment B rated the transparencies higher than the children did. The higher ratings by the teachers suggest that the adults were more willing to accept the visual images as symbolic events than the children were. Some of the children had a tendency to rely on the literal representations of the visual images. This distinction between the teacher's and the children's perceptions was very obvious in the ratings for the "Early Warning" transparency. The teachers rated the transparency very high: 7-7-6. The children rated the transparency very low, their average being 2.89 on a seven point scale.

On the "Early Warning" transparency are two images: a tornado looming in the sky and a chicken outside a prefabricated chicken house. The chicken outside the chicken house is a flaw that was intentionally left unchanged by the investigator. The chicken outside the house contradicts the meaning in four key lines of the poem:

> Thousands of hens, who've never seen
> The light of the sun, or
> Touched the earth with their beaks,
> Go up the funnel like souls to God.

Most children observed the flaw in the transparency and rated the transparency low. The high ratings by all three teachers suggest that either the teachers did not observe the flaw or that they did observe the flaw but found a way to rationalize it.

Table 13 shows the children's responses (C) and the teachers' responses (T) in rating six poems that were used by all three classes in the media treatment. A complete table of responses for all the transparencies is given in Appendix B.

While there were considerable discrepancies between ratings by the teachers and the ratings by the children, all three of the teachers indicated that the transparencies had helped them and their children to arrive at new meanings for some of the poems. The evaluation task of rating each transparency and giving reasons for ratings undoubtedly forced the children to look more closely at the images in the poems.

Table 13
CHILDREN'S AND TEACHERS' RESPONSES TO TRANSPARENCIES

Poem	C-T	Ratings 7	6	5	4	3	2	1
Mummy Slept...	C	17	26	8	10	3	2	2
	T	2	1					
Catalogue	C	15	28	11	4	2	3	2
	T	2	1					
Traveling...	C	9	8	11	8	3	14	9
	T	2	1					
Jake Hates...	C	8	27	10	8	4	3	1
	T	2	1					
Bats	C	9	10	11	12	3	8	9
	T		1	1	1			
Early Warning	C	3	5	5	6	12	18	16
	T	2	1					
An Easy...	C	22	26	4	5	3	2	2
	T	2			1			

Summary

An analysis of pre-test scores clearly indicated that there were no significant differences among treatments. All four treatments were basically at the same level of performance in responding to literature and interpreting metaphoric language in poetry before the treatments were administered.

An analysis of post-test scores showed that there were no significant differences among treatments in the children's applications of a wide range of critical reading skills but that there were significant differences in the children's skills that were related specifically to the interpretation of metaphoric language in poetry. In an analysis of variance of treatment scores for the "11 Critical Items Measurement," which measures skills in interpreting metaphoric language in poetry, the investigator observed differences that were statistically significant at the .01 level. In applying the Newman-Keuls Test to probe the differences among treatments, the investigator observed that the differences between Treatments A and B and the differences between Treatments A and C were significant at the .05 level. All other differences among treatments were not significant.

Due to the limitations of the test instrument and the design of this study, no attempt could be made to describe the extent to which Treatments B and C provided an instructional advantage to children in the acquisition of poetry reading skills. However, the investigator did provide descriptive data that identified some of the major trends which could be responsible for the differences among treatments. Those trends are summarized as follows.

1. In the Induction Stage, Treatments B and C were similar in the sense that both used experiential types of activities. With the exception of the media used by the teachers of Treatment B, the teachers in Treatments A and B were similar in the sense that both relied on referential activities when introducing poems.
2. In the Search Stage, teachers and poets focused on many of the same key elements of the poems. However, the most obvious difference was that the poets included more questions and activities which guided pupils in experiencing the poems. The teachers, on the other hand, frequently asked questions that pre-empted experience. The poets seemed to be more involved with the dynamics of interchange in discussing levels of meaning attributed to an image. Invariably the teachers were on target with the key elements, but frequently their search approaches were based on referential rather than experiential guidance.

3. In the Application Stage, the most obvious differences were: (a) The poets did more synthesizing of poetic elements operating within a single poem or within several poems; (b) teachers in Treatment B involved their classes in evaluating the relationship of images on transparencies to images in the poems studied, thus forcing the pupils to re-examine the images in the poems more closely.

In a special analysis of children's and teachers' responses to the transparencies, the investigator observed that the children who rated the transparency high made statements that indicated a willingness to accept the symbolic values of the images on the transparencies to be in harmony with the symbolic values of images found in the poem. Conversely, the low raters tended to make statements that suggested they expected the transparencies to represent the poems more literally. Most children agreed with the statement that the images on the transparencies were related to the meanings of the poem. However, a fair percentage of children disagreed with the statement or remained neutral. In nearly every case, the teachers in Treatment B rated the transparencies higher than the children did, suggesting that the adults were more receptive than were the children to interpreting the visual images as symbolic events.

CHAPTER V CONCLUSIONS AND IMPLICATIONS

This chapter is divided into three major parts: the conclusions that can be drawn from the statistical results in Chapter IV, the limitations of the study, and the implications of the findings. Each conclusion addresses one of the six null hypotheses stated in Chapter III. The limitations of the study disclose those parameters that affect the generalizability of the findings. The implications attempt to identify possible areas of future research and suggestions for improving poetry instruction.

Conclusions

Chapter III ends with the six null hypotheses. For the sake of clarity, each hypothesis is restated in this chapter and is assigned a decision rule to reject or not reject the hypothesis. An explanation of each decision follows:

There will be no significant differences among treatments in pupils' application of a wide range of critical reading in interpreting imaginative prose and poetry.

The investigator cannot reject the hypothesis of no differences because the observed differences among treatment scores on the post-test for "A Look at Literature" were not great enough to meet the critical value of the F test in Table 8. One can assume that no single treatment or set of treatments had any effect greater than or less than the effects of any other treatment or treatments in developing a wide range of reading skills for interpreting prose and poetry.

There will be no significant differences among treatments in pupils' application of specific reading skills for interpreting metaphoric language in poetry.

The investigator rejects the hypothesis of no differences because the data in Table 9 shows differences among treatments that are significant at the .01 level. An analysis of variance of mean-score differences for the "11 Critical Items Measurement" test show that the differences between treatments are greater than the within treatment differences. The Newman-Keuls Test results in Table 10 show that these significant differences are attributed to mean-score differences between Treatments A and C and between Treatments A and B. The media and poet treatments scored significantly higher than the teacher treatment. These findings suggest that internal and external instructional support, as used in this study, will provide children with an advantage in developing skills for poetry interpretation.

There will be no significant differences between the treatment means of pupils whose teachers received special external instructional support (media) and those whose teachers received no special internal or external instructional support.

The investigator rejects the hypothesis of no differences because the data in Table 10 show that the pupils in Treatment B scored higher than the pupils in Treatment A. These differences were significant at the .05 level.

The instructional approaches by teachers in Treatment A and B were very similar, except for the use of media by the teachers in Treatment B. In the Induction Stage, the teachers of Treatment B used films and slides to prepare children to look at visual images in terms of symbolic events. In the Application Stage, the teachers of Treatment B used transparencies to involve the children in closely analyzing the poems. The teachers in Treatment A, on the other hand, relied on their own methods of verbal cuing in all four stages of the common approach model. It seems very likely, then, that the use of media by the teachers in Treatment B is responsible for the mean-score differences between Treatments A and B.

It should be understood that these findings do not imply that any indiscriminate use of media would allow children to acquire an advantage in responding to metaphoric language. Media designed to "tell" children what they should believe about a poem, for example, run counter to the media-design of this study. A film or filmstrip that explicates the meaning of a poem provides only a referential activity, which could limit one's response to both the visual and the poetic events. However, this investigation does not really test the hypothesis of no differences between referential and experiential formats in media.

The transparencies in this study, even though they need considerably more work, were designed against a background of aesthetic theory formulated by poets such as Allen Tate, T. S. Eliot, and Ezra Pound, by artists such as Marcel Duchamp and Adolph Gottlieb, and by art critics such as Matthew Lipman and Gygory Kepes -- all deliberate experimenters with imagery and tension in their crafts.[78] The investigator deliberately applied the concept of tension to the design of the transparencies so the children could (1) experience tension in the poem through the contrasting images and (2) verify a statement being made about the poem. Media that do not allow the viewer to recreate experiences run counter to the designs of this study.

There will be no significant differences between the treatments of pupils whose teachers had special internal instructional support (poets) and those whose teachers received no special internal or external support.

The investigator rejects the hypothesis of no differences because the data in Table 10 show differences significant at the .05 level. Treatment C (the poet treatment) scored the highest of all treatment groups. On the other hand, Treatment A scored the lowest.

The findings in Chapter IV suggest that the poets in the classroom, because of their unique insights into metaphoric language, provide children an instructional advantage in the acquisition of skills needed to interpret poetry. From the descriptive data taken from the teachers' and poets' logs, one can infer that the poets placed the children in situations to experience events central to the children's understanding of the poetic elements and meaning of the poems. The poets allowed the children to be caught up with the dynamics of interchange in discussing levels of meaning, frequently shifting from the experiential, to the literal interpretations, to the symbolic, and back to the literal and onto the symbolic, constantly weaving webs of meaning based on experience. Approaches used by the teachers were often based on referential guidance, with the teacher always directing, frequently limiting, and sometimes telling the response.

Another way of putting it is to say that the poets appeared to become lost in metaphoric language -- immersed in prompting themselves (along with the readers) to reconstruct meanings from the given imagistic concretions and tensions -- like reconstructing new atoms by re-arranging electrons and neutrons. Their play with language was dynamic. With the teachers, the response to language-play tended to be static. Teachers and children seemed to stand on the outside of the poem, trying to describe it through paraphrase. There was no reconstruction of new atoms, only at times a classification of the ones being observed.

There will be no significant differences between the treatment means of pupils whose teachers received special external instructional support (media) and those whose teachers had special internal support (poets).

The hypothesis of no differences cannot be rejected, since the data in Table 10 show no significant differences between Treatments B and C. Common to both treatments were experiential activities which permitted the teacher and the children to be explorers of metaphoric language. The use of films, slides, and transparencies in Treatment B allowed the children to speculate on the meanings of visual images and forced children to look more closely at the poetic tensions. In Treatment C, the poets placed the children in situations to experience the events central to the children's understanding of poetic concretions and meanings.

There will be no significant differences among scores of pupils in the Control Group and those in the three poetry-instruction groups.

The hypothesis of no differences cannot be rejected since the data in Table 10 do not show a statistically significant difference between Treatment D and any other treatment. However, this investigator is aware of some ambiguity in this decision rule and approaches its explanation with caution. Below are questions and answers designed to reveal several facets of the ambiguity inherent in the findings.

1. Why did children in Treatment A, who received instruction in poetry, score lower than those

children who received no instruction? One would think that an exposure to poetry over an eight-day period would give children some advantage over those who had no exposure. It appears that the instruction in Treatment A either created some confusion about interpreting poems or saturated the children with poetry to the point that the children did not have the interest to perform well on the test. It is possible that without any internal or external instructinal support over an eight-day period, the children in Treatment A were simply tired of poetry. If this is true, the post-test picked up some negative influences which militated against the children in Treatment A developing reading skills for interpreting metaphor. Time spent on poetry instruction is one of the basic differences between the conditions in Treatment A and Treatment D. Factorial designs in research may be needed to determine if time spent on poetry can affect a negative influence.

2. Why weren't the differences of scores among Treatments B, C, and D statistically significant? One might assume that children who received unique internal or external instructional support

over a period of eight days would clearly outperform those children who received no instruction in poetry at all. It is possible that children, not only at this level but at all levels, need more time to develop these skills before they can demonstrate a high degree of proficiency in applying them. However, another possible explanation for the lack of statistical significance in measuring the difference between Treatment D and any other treatment is that the "11 Critical Measurement Items," because of their quantity and not their quality, may be too blunt of instrument. This may be the reason Renee Huettenmueller (1973) designed her own 44 item poetry test patterned after the poetry items in "A Look at Literature." If bluntness of instrument is indeed the problem here, one might assume that the differences among all treatments are greater than what was observed. If the number of items on the test had been increased to 44 and if the sample size had been increased to 200, it is very possible that a larger spread among treatment means would occur and that these differences would be statistically significant. Of course, both of these possible explanations are conjectures at this point.

3. Is it possible that the teachers in Treatment D administered the test differently than the teachers in the other treatments? Part I of "A Look at Literature" (25 items) is administered with the teacher reading the literature and the test items aloud while the children follow in their own silent reading. Unsollicited statements from two teachers in essence said the same thing: "I really had fun giving the test to my class." Both teachers who made these statements were the two Treatment D teachers whose classes had the largest gains. (See Table 19.) One of the two teachers described her performance in administering the test: "When I read the last line of this poem, I put a lot into it. I shouted so loud one of the boys fell out of his seat. They loved it--especially the boys." It is possible that one or two of the teachers in Treatment D may have read Part I in a way that dramatized the events for the children and allowed them to experience some of the meaning through the delivery. Even though the investigator coached the participating teachers and gave each of them three pages of instructions for administering the test, it is possible that unintentional cuing may have

influenced some of the responses in Part I. If the investigator wanted to avoid this problem in the future, he would have the entire post-test administered without the teacher reading Part I to the class, or he would hire a group of professional testers.

The performance of the Control Group adds a valuable perspective to this investigation and suggests several limitations which future researchers should avoid.

Limitations

The reader should be aware of the following limitations of this study.

1. One of the biggest limitations is sample size. Only 68 children were used in each treatment, totaling 272 children. A larger sample size would reduce the error of measurement and possibly allow the statistical differences among treatments to become more apparent. Thus to handle the logistics of larger sampling, the services of a large organization (NAEP, ETS, NCTE, for example) would be optimal.
2. Another major limitation (related to the first) is the representativeness of the population. Large inner-city schools with their high integration of racial and ethnic backgrounds, for example, are not fairly represented in this study.

3. Another limitation can be attributed to the methods for selecting children and teachers for this investigation. Rather than children being randomly assigned to classrooms, intact classes of children were randomly assigned to treatments. The classroom teachers in this study were drawn from roughly 50% of the population of sixth grade teachers in Tippecanoe County, Indiana, rather than from the entire population. The sampling of teachers represents only those teachers who would be inclined to volunteer for such a study with poetry. The poets were selected by the investigator and were not drawn from any group of poets. The poets do not necessarily represent all poets.

4. A fourth limitation has already been discussed: the test instrument. "A Look at Literature" remains, for the time being, the best instrument available for the study. However, it is apparent that a longer, more sensitive test is needed to measure the children's responses to metaphor in poetry. The investigator feels confident that the "11 Critical Items Measurement Test" was a valid measurement but that more items similar to the ones on the test are needed for a more sensitive instrument. (Again, some such enterprise

should be undertaken by a company specializing in constructing tests and measurements.)

5. In this study, time was not tightly controlled. All treatments lasted eight days and covered 16 poems. However, due to variations in scheduling, some classes devoted only 35 minutes per session to poetry, while others devoted 55 minutes. All teachers were advised to average 45 minutes per session, but a few of the teachers reported there were occasional variations due to scheduling.
6. The fact that poetry instruction was administered over a period of eight days rather than a longer period is bound to be a limitation. More chances for differences to be observed could occur if the study had spanned two or three months.
7. The selection of poems may have limited a poet's or teacher's instruction in poetry, even though the investigator made special efforts to find poems that would be acceptable to all the instructors.
8. The application of the ISSA approach model may have been a limitation to the poets and to those teachers who prefer not to have any superimposed instructional format. For them, other models might work better.

9. The absence of any device to discount the Hawthorne Effect in the use of media or of the poets also adds a limitation.
10. The investigator made no effort to report descriptive data through direct observations of poets and teachers in the classrooms. What is known about the content of the lessons was reported by the teachers and poets through their logs and through a follow-up workshop. When the investigator weighed visiting the classrooms and possibly influencing teachers' and children's responses, he opted not to observe classes.

All of these limitations can affect the generalizability of the findings in this study. Consequently, the reader should be cautioned about the application of the findings of this study. Only if this study is replicated can we become more confident about the nature of the differences.

Implications

Up to this point, educators have been saying that the enthusiasm a teacher brings to the poem is the most important factor in teaching poetry.[79] Others have implied that children's preferences for poems may be the most important consideration.[80] While the investigator does not deny that both are important considerations, he believes that a more fundamental concern for effective poetry instruction is the formulation of a construct theory of language which will permit teachers to be experimentalists. The descriptive data in Chapter IV show some basic differences in the poets' approaches and the teachers' approaches. The poets were inclined to stress more experiential activities with language, whereas the teachers approached language through referential guidance. The findings in this study suggest that children involved in experiential activities through the poets' approaches develop more insights into the interpretation of metaphoric language than do those children who must depend on the teachers' referential activities and verbal cuing.

Two equally interesting implications arise from these findings: (1) the teachers' construct theory of language may prevent them from providing the types of language experiences their children need to develop skills for interpreting poetry; (2) the children's perceptions of the role played by the teacher in other instruction may be shaping the role of the teacher as a referential guide for poetry instruction. An unsolicited statement from one of the teachers in the study was: "I try, but the children won't let me experiment with language. They want the traditional structure with the teacher being the director of information."

Research is needed to investigate what causes teachers to assume a non-experimentalist role with language. Is it the attitude of the children who have been conditioned to look at their teachers as test-makers and mere facilitators of learning? Is it a prevailing, oppressive attitude within the schools? Is it the teachers' theory of language? Is it the lack of training in the teaching of poetry? Is it the teachers' lack of experience in writing?

It would seem very likely that teacher education institutions and other agencies interested in improving teacher competence could develop within teachers a strong internal support system for teaching metaphor if they trained teachers to recognize metaphor, to invent metaphors, and to lead children through the processes of metaphoric composition. Through experience with the craft, the teachers would acquire new forms of knowledge about the types of discoveries they expect their children to make.[81]

The children's performance in the poet treatment (Treatment C) makes a very positive statement supporting the poet-in-the-school programs. However, that was really not the intent of this investigation. The poet-in-the-school program does not need to be defended by this researcher. More relevant to this probe on support environments are these questions: What effect on instruction would occur if the teacher, through special training, had some of the insights that a poet has in teaching metaphor? Would it be possible to observe any differences if the teacher had this support?

The findings in this study also imply that media can be used as effective forms of external support for instruction in poetry. Media materials designed for this study gave teachers the tools to explore important elements of metaphoric language and provided children with the opportunity to experience tension created by contrasting images. However, as stated earlier, it should be understood that these findings do not imply that any indiscriminate use of media can provide external instructional support. Media that do not allow the viewer to re-create experience or those that provide experiences irrelevant to a child's understanding of metaphor are contrary to the media designs in this study.

Concerning media designs for poetry instruction, much more research needs to be done just in terms of finding how children respond to visual stimuli. In analyzing the children's responses to the transparency for the poem "Early Warning," for example, the investigator observed that most of the children considered the literal events on the transparency to interfere with the literal and symbolic events in the poem. The responses to this transparency and others suggest that the interplay between the literal and the symbolic values of images remains delicately balanced and that the observer must experience both to arrive at a successful interpretation of not only the poem but the visual event as well. Research needs to probe the following:

a. What imagistic values tend to create or destroy an intended balance of literal and symbolic values of a visual event?

b. What in the observer's perceptual range tends to create or destroy an intended balance of literal and symbolic values of a visual event?

c. If the children's grasp of "tension" is really important in understanding poems, what media materials can enhance children's experiencing it?

d. To what extent can intentional flaws in transparency designs be used as test frames that condition children to develop analytical skills in reading poetry? If teachers use transparencies to place children in a position to interpret the relationship of two or more parts of a given work, it seems very probable that the transparencies would help children to develop analytical skills, particularly if the children had to defend the "rightness" or the "wrongness" of the visual interpretation. Even if on occasion the children were wrong in their own interpretations, the verbal feedback from their peers and the teacher might provide a wealth of information to them about levels of meaning and ways of looking at a poem, and eventually strengthen the children's power of perception.

The problem of providing effective poetry instruction in the sixth grade is complex because many of the children at this level are still dependent on concrete operations and need to experience metaphoric events before understanding them. However, after reading what the poets did with poetry, this investigator is convinced that children can understand metaphoric events even in some of the more "difficult" works. When approaching poetry, teachers must realize the need for internal or external instructional support or both. Here are a few suggestions which teachers might follow in adding support systems to their classrooms.

1. Teachers might adapt the given media in this study or design their own media that would prime children to interpret images as symbols and allow children to experience tension through contrast. If teachers design their own media, they should familiarize themselves with the nature of compactness in imagery, with the concept of "tension" in art and poetry, and with the concept of "structural analysis" in the study of literature. All three are very relevant to media designs for poetry.
2. Teachers might invite to their classes poet-teachers to teach a poetry unit.
3. Teachers might encourage their schools to participate in the poet-in-the-school program.

4. Teachers might enroll in courses that teach them how to write. By struggling with the written word, particularly by struggling with the process for arriving at effective metaphors, teachers may develop greater insights into poetic elements that can help their children to understand poetry. In several states intensive writing workshops for teachers are already being offered.[82]

In addition to following any of those given suggestions, teachers might consider the following as ways of becoming more aware of the types of poetic elements that can be given attention in their own classrooms.

1. Teachers might enroll in courses that teach them how to interpret modern poetry. This is not to imply that teachers do not know how to read the poetry they read to their students. However, teachers who have not had a course in modern poetry are perhaps only minimally aware of the compactness and imagistic concretions in many modern poems.
2. Teachers might develop a sense for the growth-continuum of their children by examining performance objectives that children will be expected to meet at the junior and senior high levels. Sources such as the Tri-University Project's Representative Performance Objectives

for High School English, while they should not be adapted for elementary use, offer a good perspective as to what children should be doing with poetry in later years.

3. Teachers might attend poet-directed workshops and read Kenneth Koch's Wishes Lies and Dreams and Rose, Where Did You Get Your Red?

It should be clear that this study is not an indictment of teachers. If anything, it is an indictment of our own ignorance of children's needs in understanding metaphoric language and teachers' needs of internal or external instructional support in approaching poetry.

NOTES

[1] Northrop Frye, Myth and Symbol (1963), p. v.

[2] John Ciardi, How Does a Poem Mean? (1959), p. 866.

[3] Arnold Lazarus, "A Workshop for Poets in the Schools," American Poetry Review (January/February 1975), p. 10.

[4] Barbel Inhelder and Jean Piaget, The Growth of Logical Thinking (1958), p. 250.

[5] Edward Albee, Address given at the 47th Annual Purdue University Literary Awards Banquet, West Lafayette, Indiana. April 5, 1978.

[6] Ciardi, p. 864.

[7] Ciardi, p. 864.

[8] Frye, p. v.

[9] I. A. Richards, Practical Criticism (1930), p. 214.

[10] Gertrude Paterson, T. S. Eliot: Poems in the Making (1971), pp. 23-5.

[11] Robert M. Adams, "Percipitating Eliot," Eliot in His Time (1973), p. 319.

[12] Paterson, p. 45.

[13] Ciardi, p. 868.

Also see Lazarus, p. 10.

[14] Frye, p. v.

[15] T. S. Eliot, "Hamlet," Selected Essays of T. S. Eliot (1964), pp. 245-5.

[16] Ralph Waldo Emerson, "The Poet," The Achievement of American Criticism (1954), p. 249.

[17] Edward Engelberg, The Vast Design (1964), p. 206.

[18] R. P. Blackmur, "Wallace Stevens," Hound and Horn (1932), p. 237.

[19] Ciardi, p. 994.

[20] Engelberg, p. 115.

[21] Frye, pp. 8-9.

[22] Ann Terry, Children's Poetry Preferences (1974), p. 58.

Also see Emily Martson, "Children's Poetry Preferences: A Review," Reserach in the Teaching of English (Spring 1975), pp. 107-110.

[23] David Elkind, Children and Adolescents (1970), pp. 21 and 76.

[24] David Elkind, "Language Arts and the Young Child," Language Arts (January 1978), pp. 2-3.

[25] Louise Faye Grindstaff and Al Muller, "The National Assessment of Literature: Two Reviews," Research in the Teaching of English (Spring 1975), pp. 80-106.

[26] Arthur N. Applebee, "ERIC/RCS Report: The Elements of Response to a Literary Work: What We Have Learned," Research in the Teaching of English (Winter 1977), p. 267.

[27] Grindstaff and Muller, p. 101.

[28] John William Alexander Smith, Children's Understanding of Written Metaphor (1973), p. 70-79.

[29] Smith, p. 194+.

[30] Smith, p. 61.

[31] Smith, p. 84.

[32] Smith, p. 196.

[33] Rita Brause, "Developmental Aspects of the Ability to Understand Semantic Ambiguity, with Implications for Teachers," Research in the Teaching of English (Spring 1977), pp. 39-48.

[34] Brause, pp. 43-47.

[35] Lawrence Perrine, Sound and Sense (1956), p. 63.

[36] Brause, p. 46.

[37] Brause, p. 47.

[38] Smith, pp. 204-5.

[39] Inhelder and Piaget, pp. 272-277.

[40] Rudolph Arnheim, Visual Thinking (1971), p. 154.

[41] Arnheim, p. 153.

[42] Rudolph Arnheim, Art and Visual Perception (1954),

[43] Collett Dilworth, Visualization and the Experience of Poetry: A Study of Selected Variables in Reader Response (1975), pp. 116-118.

[44] Stephen Dunning, Teaching Literature to Adolescents (1966), p. 1.

[45] Sister Ann Redmond, Children's Response to Metaphor (March 1978), p. 1.

[46] Ann Terry, p. 58.

[47] Kenneth J. Kantor, "A Camel in the Harbor," Language Arts (December 1978), p. 384.

[48] David Dillon, "Perspectives: An Interview with David McCord," Language Arts (March 1978), p. 384.

[49] Barbara Ramsell, "The Poetic Experience of Surprise and the Art of Teaching," English Journal (May 1978), p. 24.

[50] Redmond, p. 1.

[51] Dillon, p. 383.

[52] Laurel Ladevich, "Creativity, Poetry and Creative Writing," Language Arts (March 1978), p. 389.

Also see Michael True, "The Poets in the Schools' Anti-Massacre Movement," English Journal (October 1975), p. 61.

[53] Margaret K. Woodworth, "Writing from the Schools," Indiana Writes (Fall 1977), p. 161.

[54] Owen Thomas, "Children and Poetry and Teachers," Indiana Writes (Winter 1976), p. 79.

[55] Michael Allen, "Writing from the Schools," Indiana Writes (Fall 1975), p. 143.

[56] Lee Perron, "Writing from the Schools," Indiana Writes (Fall 1975), p. 157.

[57] Felix Stefanile, "Robin Redbreast in the Tree," American Poetry Review (January/February 1975), p. 11.

[58] Clint Baer, "More Riddles," Indiana Writes (Winter 1976), p. 92.

[59] Lee Perron, "Poetry as an Oral Art: Teaching a Poetic," American Poetry Review (January/February 1975), p. 11.

[60] Margaret K. Woodworth, "Hinky-Pinky, Thinky Word Game," American Poetry Review (January/February 1975), p. 12.

[61] Carol Burke, "Writing from the Schools," *Indiana Writes* (Fall 1975), p. 146.

[62] Kenneth Koch, *Rose, Where Did You Get Your Red?* (1974), pp. 1-27.

[63] Koch, pp. 10+.

[64] Koch, pp. 12-13.

[65] Koch, p. 12.

[66] Elizabeth Renee Huettenmueller, *A Multi-Sensory Approach to Teaching Poetry to Sixth Grade Students* (1973), pp. 76 and 81.

[67] Frank W. Wicker, "Our Pictures of Mental Imaging: Prospects for Research and Development," *Educational Communication and Technology* (Spring 1978), p. 21.

[68] Redmond, pp. 63-4.

[69] Redmond, pp. 43-8.

[70] Redmond, p. 63.

[71] John Orson Hempstead, *Media and the Learner: the Influence of Media Message Components on the Students' Recall and Attitude Toward the Learning Experience* (1973), pp. 74-89.

[72] Wicker, p. 18.

Also see Howard W. Levie, "A Prospectus for Instructional Research in Visual Literacy," *Educational Communication and Technology* (Spring 1978), p. 26-7.

Also see Michael D. Ruch and Joel R. Levin, "Pictorial Organization Versus Verbal Repetition of Children's Prose: Evidence for Processing Differences," *AV Communication Review* (Fall 1977), p. 270-8.

[73] Ruch and Levin, p. 278.

[74] Two films used in this study were:

Hunter and the Forest (A Story Without Words), 9 minutes, b/w, Encyclopaedia Britannica Educational Corporation, 1955.

The Magic Indian, 11 minutes, b/w and color, Bernarr Folta, 1977.

[75] Gyorgy Kepes, Language of Vision (1967), pp. 100+.

[76] Robert L. Linn and Jeffrey A. Slinde, "Significance of Pre- and Post-Test Change," Review of Educational Research (Winter 1977), pp. 139-50.

[77] B. J. Winer, Statistical Principles in Experi-Design (1972), pp. 201-204.

[78] William Van O'Connor, Sense and Sensibility in Modern Poetry (1948), pp. 143-159.

Also see Kepes, p. 100+.

[79] Stephen Dunning, Teaching Literature to Adolescents: Poetry (1966), p. 13.

[80] Helen K. Mackintosh, "A Study of Children's Choices in Poetry," Elementary English Review (May 1924), pp. 85-89.

Also see Ann Terry's Children's Preferences in Poetry (1974).

[81] Peter Evanechko, Lloyd Ollila and Robert Armstrong, "An Investigation of the Relationships Between Children's Performance in Written Language and Their Reading Ability," Research in the Teaching of English (Winter 1974), pp. 315-326.

Also see Donald L. Graves, "We Won't Let Them Write," Language Arts (May 1978), pp. 635-640.

[82] As this manuscript is being prepared, a state in-service program proposal entitled "The Indiana Writing Project" is being applied for by the Division of Curriculum of the Indiana Department of Public Instruction. The aim of the project is to retrain teachers statewide in the teaching of composition. A similar program has been on-going in the states of Vermont and Iowa.

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APPENDICES

APPENDIX A MATCHING WITHIN SCHOOL CORPORATION

Table 14
PRE-TEST MEAN SCORES USED FOR MATCHING WITHIN SCHOOLS

	SCHOOL	CORPORATIONS	
Classes	X	Y	Z
1.	29.15	*32.07	*37.81
2.	28.33	*31.75	36.05
3.	28.45	26.76	34.50
4.	28.24	26.29	33.48
5.	*26.20	27.27	32.35
6.	*26.08	23.73	

*Classes that were not randomly assigned to treatment.

After classes were randomly selected for the pre-test, 17 classes in three school corporations were administered Form A of "A Look at Literature." On the basis of compatibility of scores, four classes within each school corporation were selected for random assignment. Within each school corporation, one class was assigned to each of the four treatments.

APPENDIX B MEDIA

Instructions and Scripts for Slides

Purpose: To prime students to look at images in terms of symbols.

Encounter: First day of treatment.

Initial Remarks: Tell the students: "Soon we will be looking at a number of poems. Within these poems are images which serve as symbols. To prepare you to interpret those images, I want you to look at some slides and tell me what you see in them."

Equipment: Make sure your slide projector is operating correctly before using it with the class. Your equipment should be compatible with the Kodak carousel tray housing the slides.

You will need a projector, a screen, and a pen light (unless you have enough light to read your script).

Conditions for Viewing: Make certain every student will be able to see the screen. The room must be dark enough to get a sharp image on the screen. If the room is too light, make arrangements to show the slides in another room.

SCRIPT FOR SLIDES IN TREATMENT B

by Bernarr Folta

Slide Description	Voice
(Black Slide)	
1. Liberty bell.	1. A symbol is something that stands for something else. It's an image that can have a special meaning. Can the bell in this picture be a symbol? What does it stand for?
2. Statue of Liberty	2. What is the symbol in this picture? What does it stand for?
3. United Nations' flags	3. Flags are common symbols. What do these flags stand for? Do you see another symbol in this picture? (U.N. building) What does it stand for?
4. American flag	4. Is this a symbol? What does it stand for?
5. American flag on moon	5. Here is another flag of the United States. It, too, is a symbol. What does this flag stand for that the other American flag didn't stand for? What caused the meaning of the symbol to be slightly different?
6. Man with medals	6. What symbols do you see in this picture?
7. Eagle	7. This picture contains several different symbols working together. What different symbols can you find? What does each symbol mean?

Slide Description	Voice
8. Machine wheels (gears)	8. Almost anything can be used as a symbol. Look closely at this picture. What do you see? Can the gears in this picture be symbols of anything?
9. Yellow and white eggs	9. Again look closely at this picture. What do you see that is alike? What do you see that is different? Can the eggs in this picture be symbolic of anything?
10. Man in a maze	10. Can this picture be symbolic of anything? What might this picture stand for?
11. Half face of a girl	11. Here is a picture of a face. In what ways do you find this to be an unusual picture? If there is anything symbolic about the picture, what are the symbols? What do they stand for?
12. Feathers, window...	12. Symbols are clues to meanings. Here is a picture using many symbols to tell a story. What symbols do you see? What story do the symbols tell?
13. Rich man	13. Two symbols that are opposite each other in meaning can sometimes make very powerful statements. Consider this picture to be symbolic of something.

Slide Description	Voice
14. Poor black boy holding gun to his head	14. Now look at this picture. What does this picture stand for? What new meaning is created when we put both these pictures (#13 and #14) next to each other?
15. Mother and child	15. Now look at this slide and the one that follows.
16. Baby (flood victim)	16. Now look at this picture. What do these two pictures (#15 and #16) stand for when placed next to each other? What statement do the slides make?
17. Clown	17. Look at this picture and the one following.
18. Lady sitting (soft sculpture)	18. How are they different? How are they alike? What do both pictures say when placed next to each other?
19. Girl kneeling	19. Now look at these last two pictures.
20. Statue of kneeling woman	20. What similarities do you find? What differences? What statement do these pictures make when placed next to each other? What is being said about the girl?

Instructions for Use of Films

Purpose: To prime students to look for metaphoric images

Encounter: Second and third days of the treatment

Initial Remarks: "The other day we discussed the symbolic meanings of images in slides. Today we will look at a movie that tells a story. Some of the images on the film can be interpreted as symbols. Watch the film and afterwards tell me what symbols you found."

Equipment: You will need a 16mm movie projector, a reel, and a screen. Make sure your projector is in good operating conditions before showing the film to the class.

Conditions for Viewing: Make certain every student will be able to see the screen. The room must be dark enough to get a sharp image on the screen. If the room is too light, make arrangements to show the film in another room.

After Showing "The Hunter": Have students establish the major contrasts and the meanings for these contrasts:

a. Fall season vs. spring season represents a time for dying and a time for living.

b. Feather in the hat vs. flower in the hat represents the hunter's resignation not to kill purely for one's own pleasure but to be in harmony with Nature.

After Showing "The Magic Indian": Have students identify the images of major contrasts and then have them explain the meanings of these contrasts. (Accept any logical interpretation).

a. Black and white film stock vs. colored film stock represents the contrast between the harsh and the idyllic worlds we live in.

b. Stagnant pond vs. flowing stream represents the contrast between the life without magic and the life with magic.

c. Dan, the believer in magic, and Mark, the non-believer represent those who are still young-at-heart to accept magic and those who exclude it from their lives.

d. Small feather that Dan finds and the large hawk feather used by the Indian are different in size only; both represent a powerful magic.

Other symbols which the students may pick up: frogs vs. no frogs, fish for Dan vs. no fish for Mark.

One interesting activity to conduct after showing the film would be to ask students to reconstruct the family referred to in the film. Most students will say there are two brothers and some reference to a mother. Students are not sure what to say about the father. He is referred to at the beginning of the film, but in the middle and near the end of the film, only the mother is referred to: "I must go back now. My mother is waiting for me. My brother is waiting for me." "Boy, wait till Mom sees those smallmouth bass..." What happened to the father? Some might speculate that the father is dead and that he, through his storytelling, is transformed into the spirit of the Magic Indian. Once the students make this speculation, the film takes on an entirely different meaning. The poem recited by the Indian invites further speculations:

> My stream, we dance around you;
>
> we dance through you.
>
> Little stream your waters reflect
>
> the heavens;
>
> Your fish walk upon half the sky.

Instructions and Scripts for Transparencies

Purpose: To provide a visual stimulus that will facilitate the formulation of a generalization about each of the given poems

Encounter: Immediately following the "SEARCH" stage in the discussion of each poem

Initial Remarks: With the use of each transparency say: "Explain the two pictures on this transparency and tell how they are related to the poem."

Equipment: Overhead projector.

Conditions for viewing: Make certain every student will be able to see the screen. The room need not be as dark as it is when you show a film, but it must be dark enough so the images on the transparency can be clearly seen.

SCRIPT

In using each transparency, say "Explain the two pictures on this transparency and tell how they are related to the poem." Additional comments follow-up are given below. The number of the left correspond to the page numbers in the poetry booklet.

Page	Follow-up Comment
1	Why would the speaker of the poem compare himself/herself to an elephant hunching up "in the dark of night"? What feeling does the poem capture?
2	Was there any important message in this poem--or was the purpose of the poem mainly to have fun with words? If it was just to have fun with words, what lines signal that intent? What pictures would you draw to show the intent of the poem?
3	How might this poem be related to people you know?

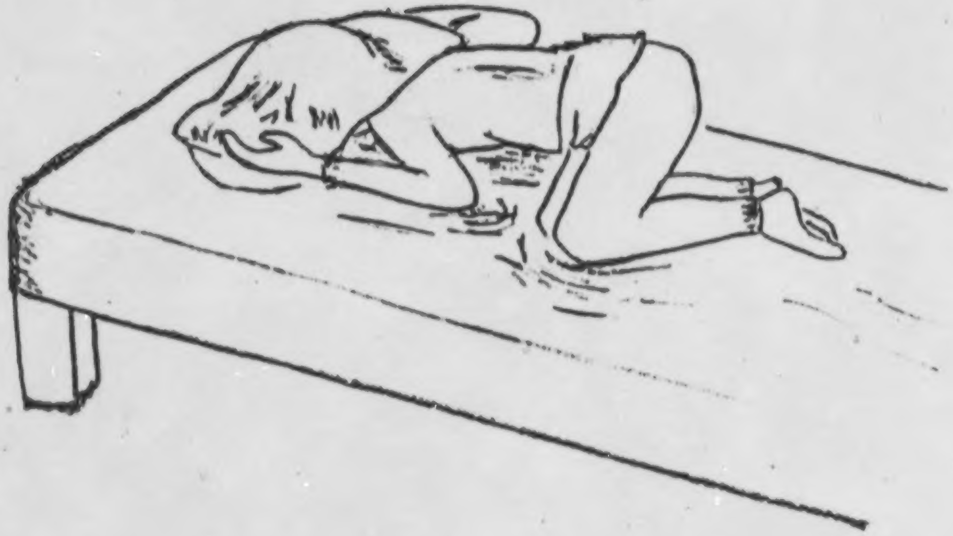
Page	Follow-up Comment
4	What feeling does the speaker get across about Evans? What kind of person was the speaker of the poem?
5	How does the poet pull the tornado and the chickens together in this poem?
	According to the poet, how do some people look at the tornado in relation to God?
6	How does the attitude of the speaker change in this poem? What statement does the poem make about those things which may appear to be minor disasters?
7	What contrast do you see between the two-headed calf in the museum and the two-headed calf looking at the stars? What statement does this poem make about "the freak" in nature? How would you guess the poet is interpreting the word "freak"?
8	Which mouse do you feel is happier? Why?
	What kinds of patterns was the poet referring to? Would you agree with him? Why?
9	Why did the speaker of the poem decide to push the deer over the side?
	How would you interpret the meaning of the title: "Traveling Through the Dark"?
10	How are the tree and the rocket alike in the poem? How are they different?
	What does the poem suggest about the relationship of man to God?
	How does the shape of the poem add to its meaning? (half a tree)
11	What is a green girl? What statement does the poem make about boys and the girls they like? Was the purpose of this poem mainly to impart information or mainly to have fun with words?
12	What statement does this poem make about people who appear to have everything?

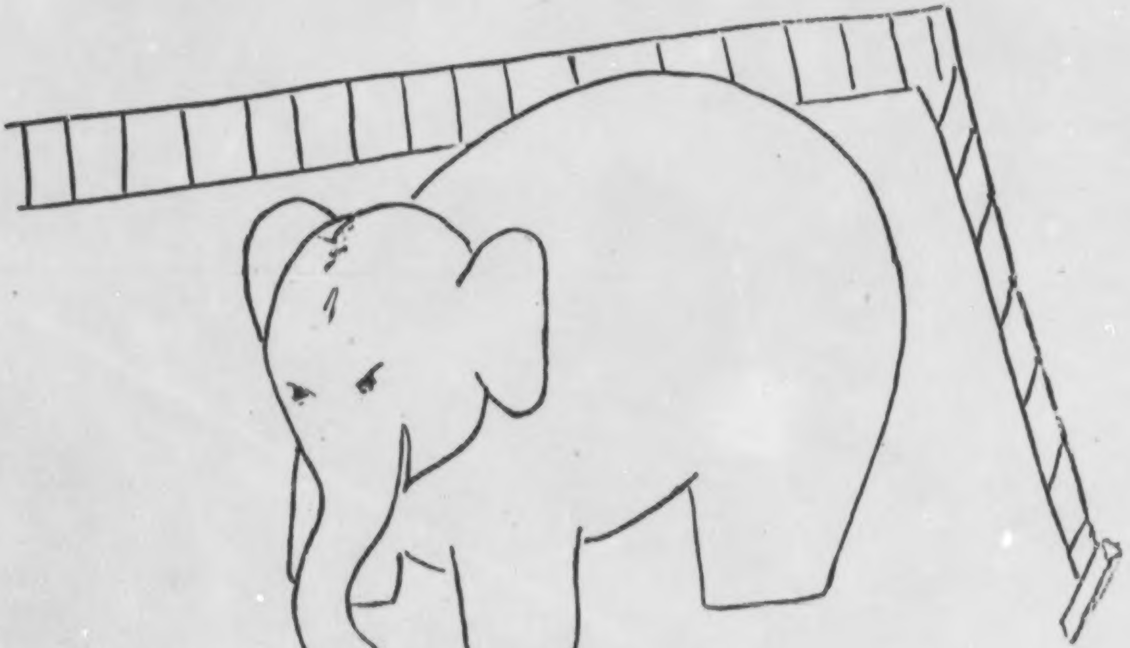
Page	Follow-up Comment
13	What major difference do you see in these two pictures? (Note in the top picture all members of the family are on the hippo. What does that say about the mother and father? the family?)
	Why was it an easy decision?
14	Which do you think the speaker prefers to be: the eagle or the mole? Why? According to the poet, what kind of animal would be worse than the eagle or the mole? Why?
15	Was the major purpose of this poem to impart information or to have fun with words?
	In what way does this poem read like a riddle?
16	What other story does this poem remind you of?
	What is the poison tree? Where does it grow?
17	What major contrast do you see in the poem? (only the moon and the mouse move; everything else is suspended)
	What feeling is created by the contrast and the repetition of the "s" sound?
18	Why is the serpent the only creature grinning? Why are the animals sad?
	Who was slain by his brother?
19	Bats are usually thought of as ugly and scarey creatures. How does the poet look at the relation between the baby bat and its mother?
	How can this poem be related to the lives of humans?
20	How would you describe the relationship between the boy and the father in this poem? What does the mother think about what's happening in the poem?
21	Why is this poem called "The Tatoo"?
	What statement does the poem make about everything we see?

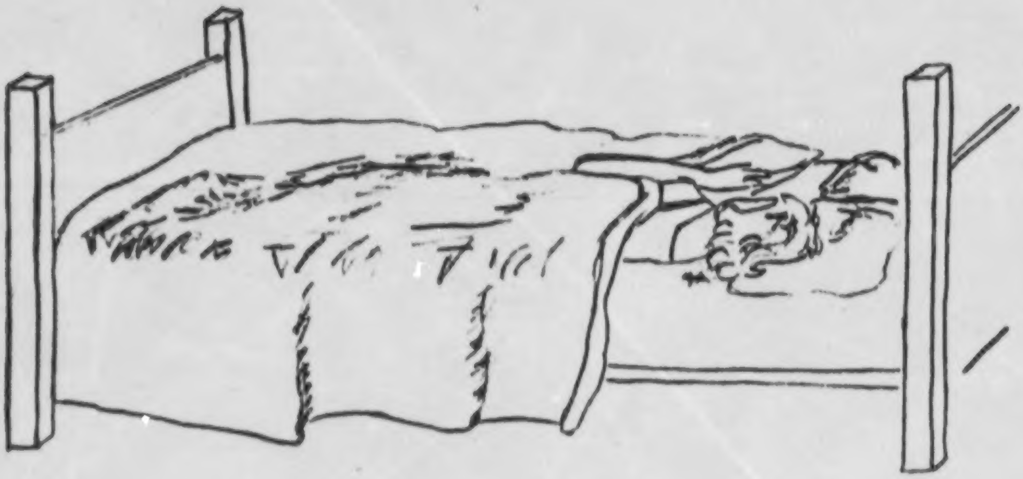
Page	Follow-up Comment
22	What characteristic does Robert Frost give to the saw? What is the meaning of the title?
23	What is the speaker of the poem saying about the creator of the tiger and the lamb? Who is the creator?
24	What happens at the junkyard to make the speaker want to get back home? What brings about this change within the speaker? What do the shifts in attitude about things seen in the junkyard suggest?

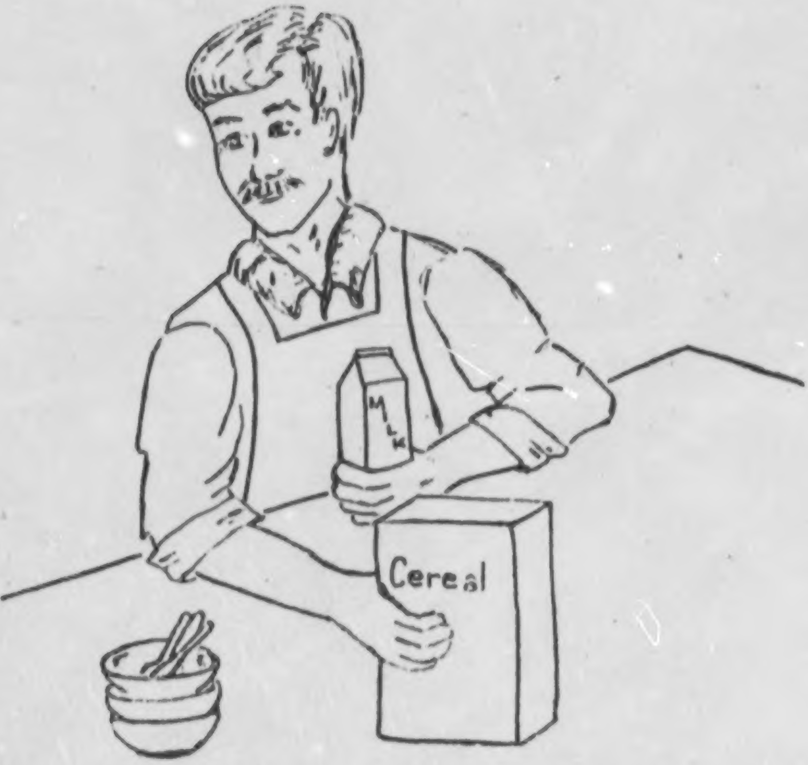
Transparency Masters

Page	Poem for Which the Transparency was Prepared
149	"Pete at the Zoo"
150	"Mummy Slept Late and Daddy Fixed Breakfast"
151	"Catalogue"
152	"Evans"
153	"Early Warning"
154	"The Bagel"
155	"The Two-Hearted Calf"
156	"Patterns"
157	"Traveling Through the Dark"
158	"Fueled"
159	"Jake Hates All the Girls"
160	"Richard Cory"
161	"An Easy Decision"
162	"The Eagle and the Mole"
163	"Southbound on the Freeway"
164	"A Poison Tree"
165	"Silver"
166	"The Animals Mourn with Eve"
167	"Bats"
168	"My Papa's Waltz"
169	"The Tatoo"
170	"Out, Out"
171	"The Tiger"
172	"Fast Run in the Junkyard"





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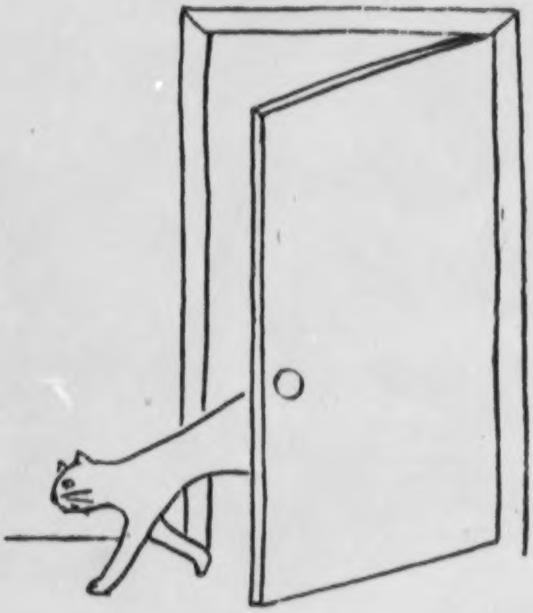

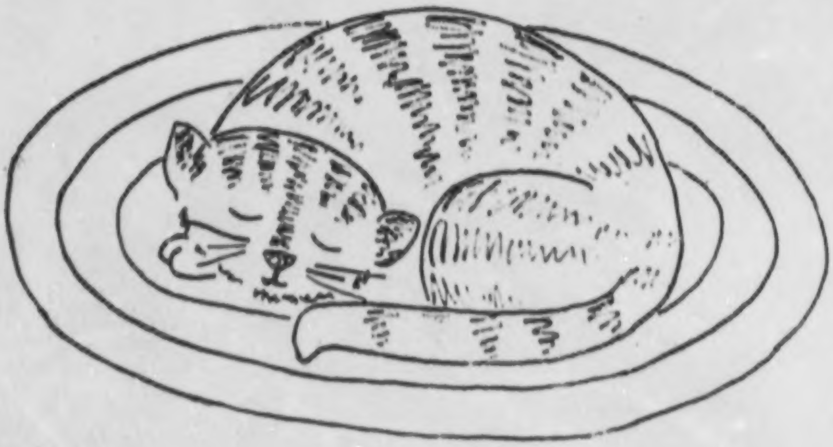

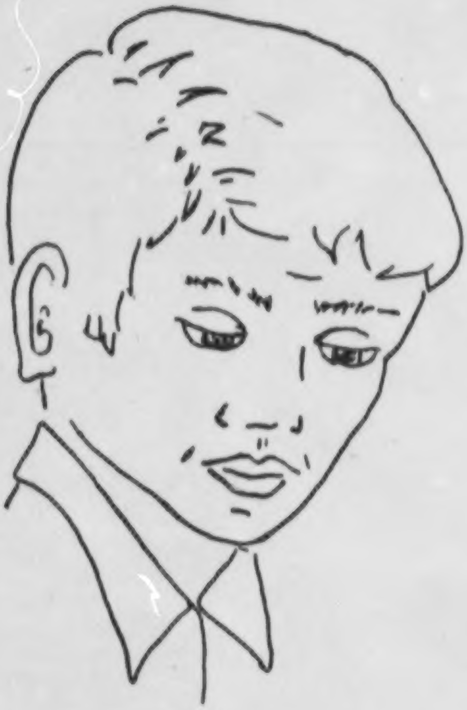

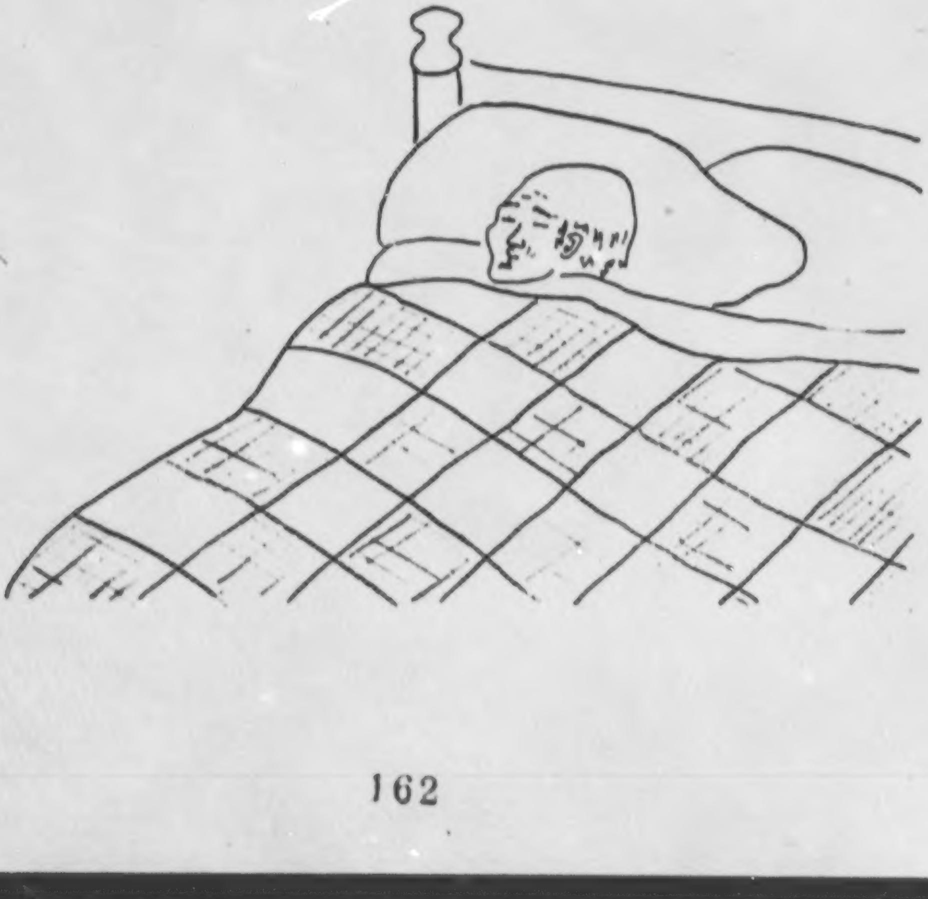

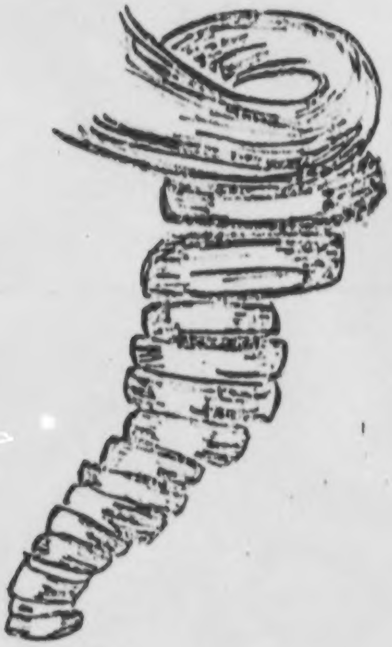

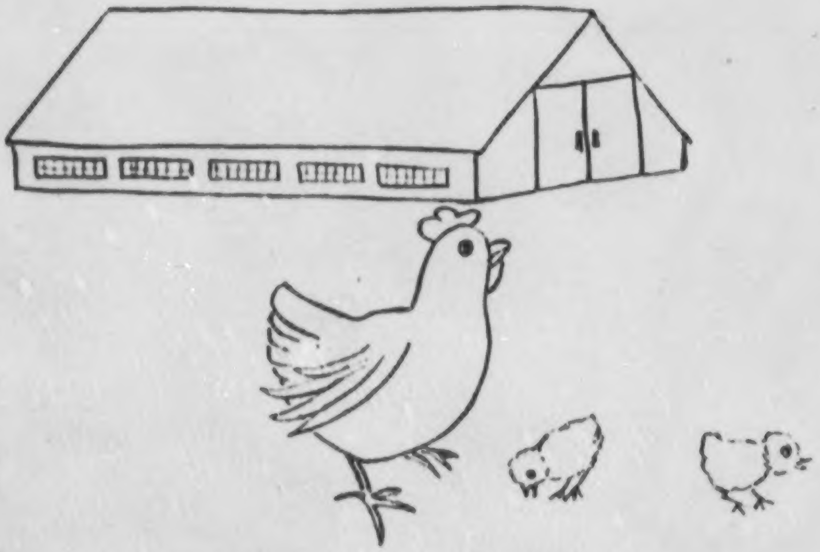

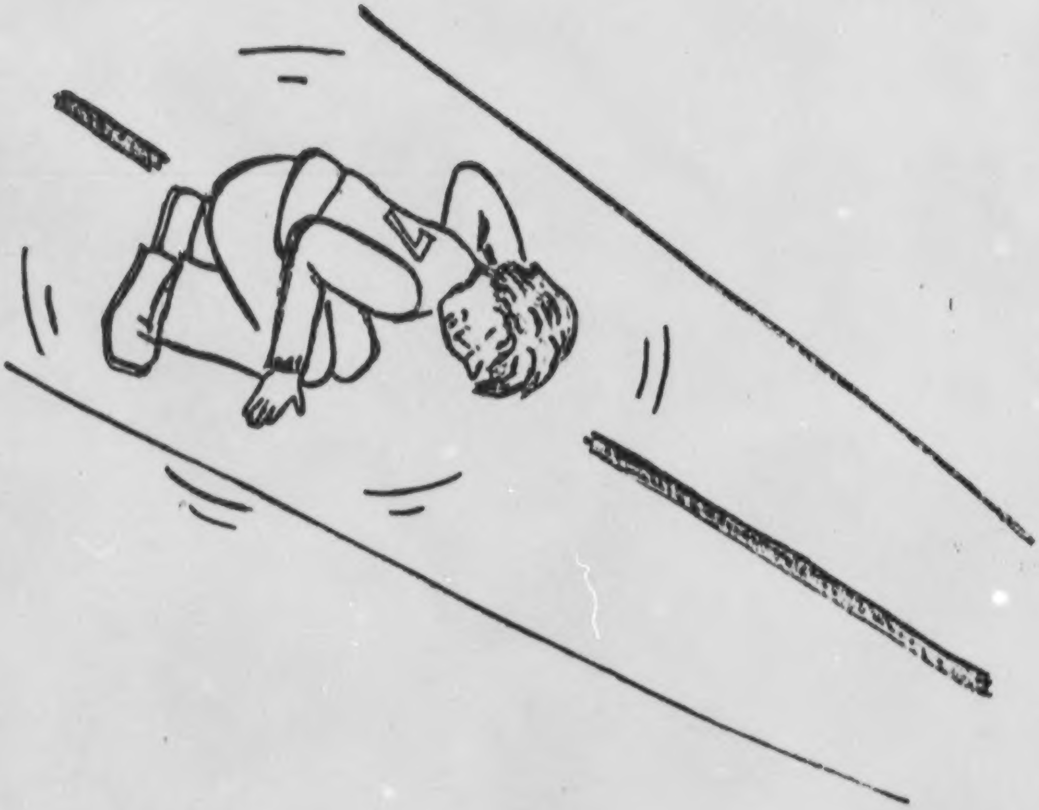

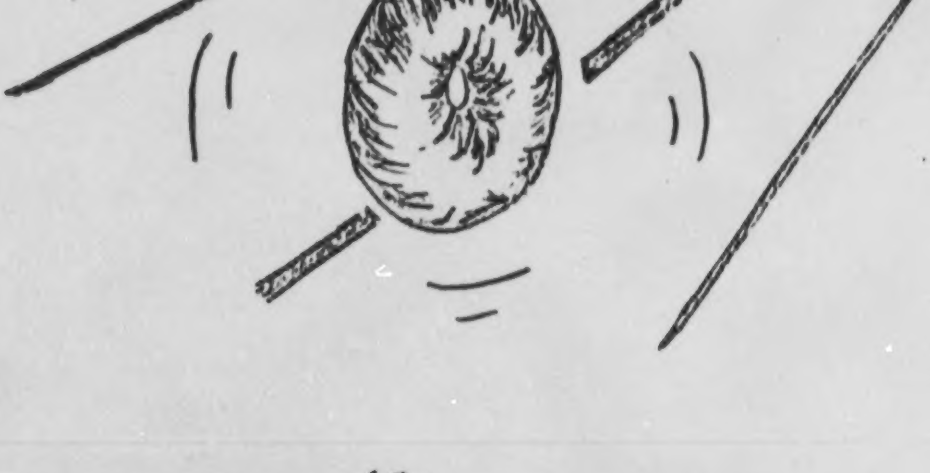

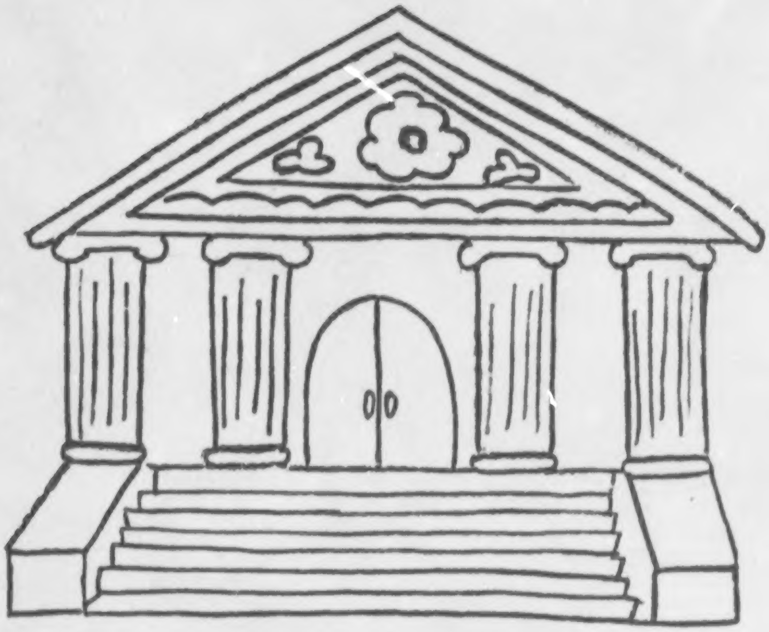

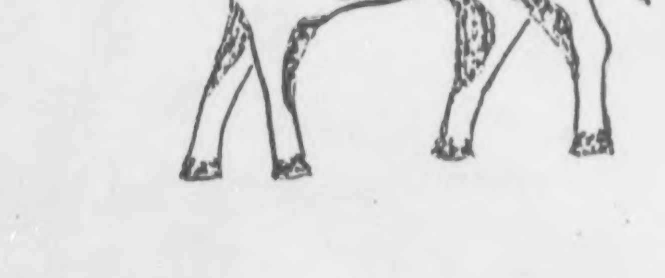

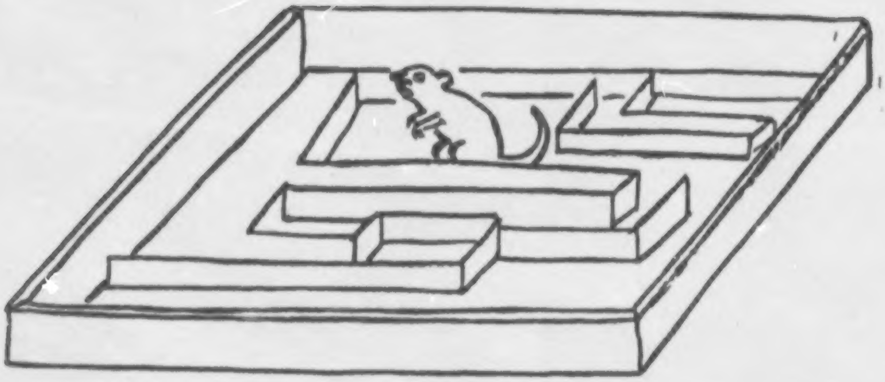

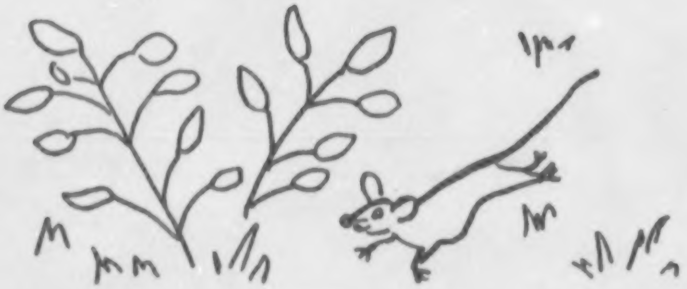

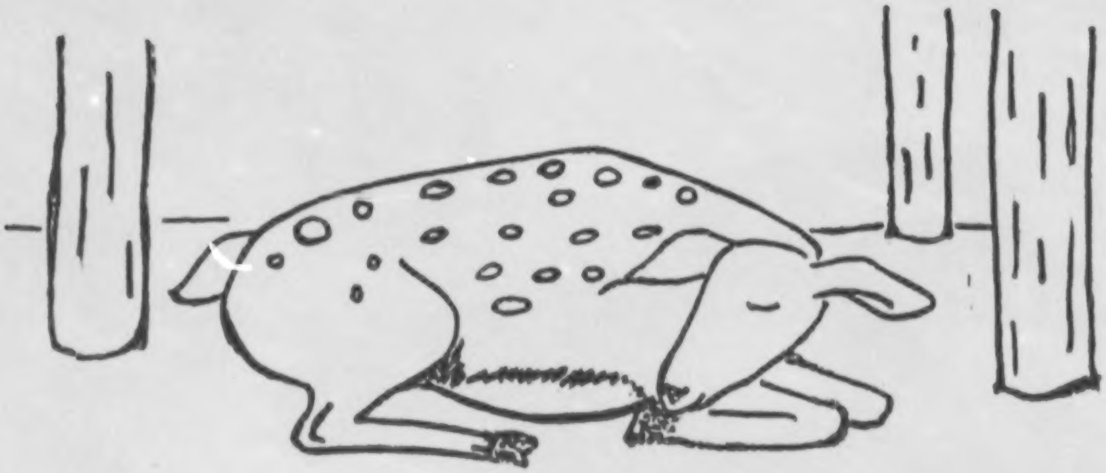

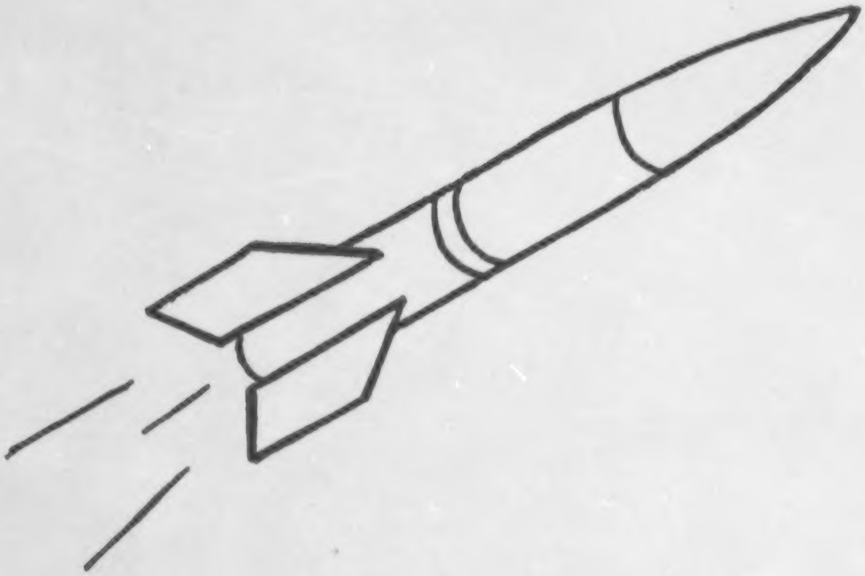

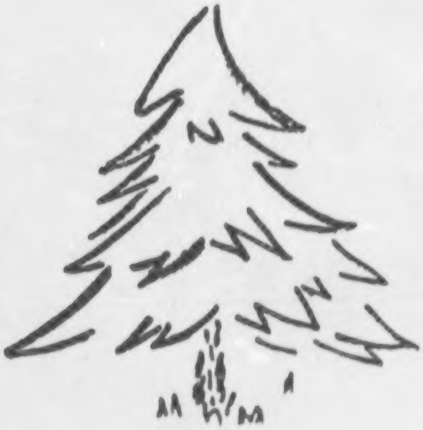

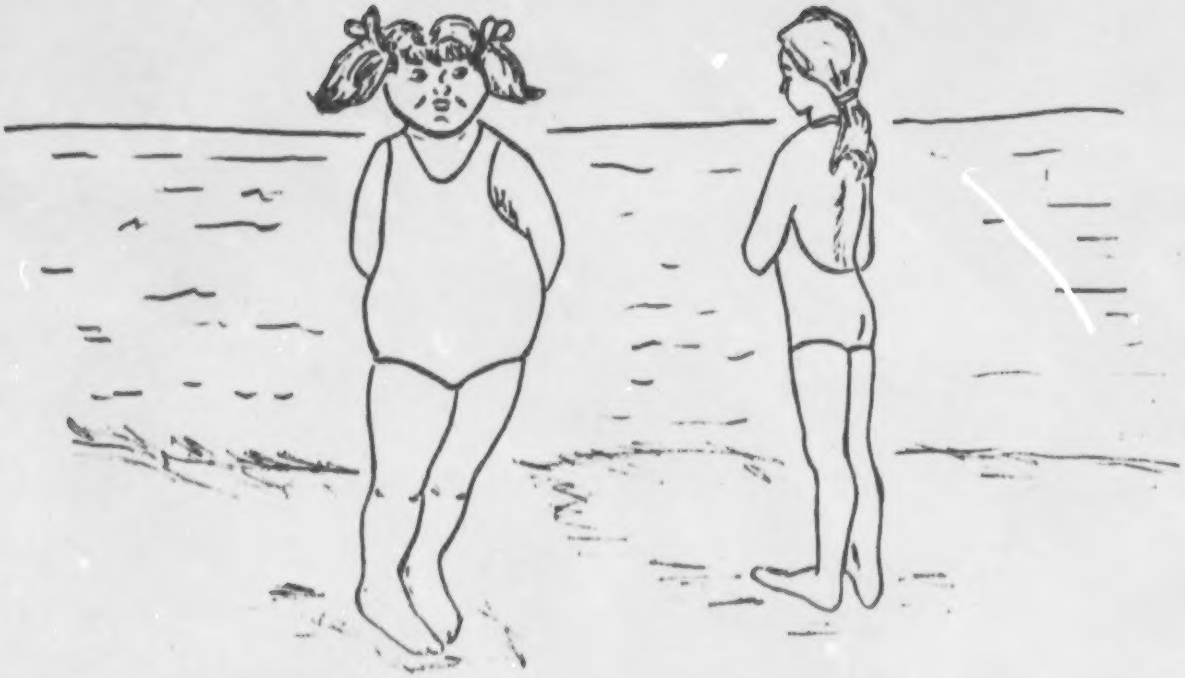

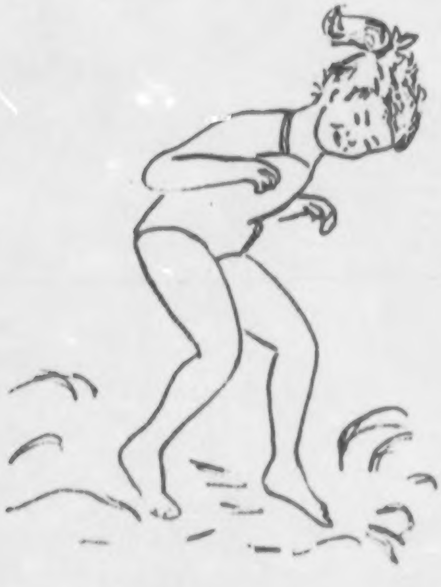

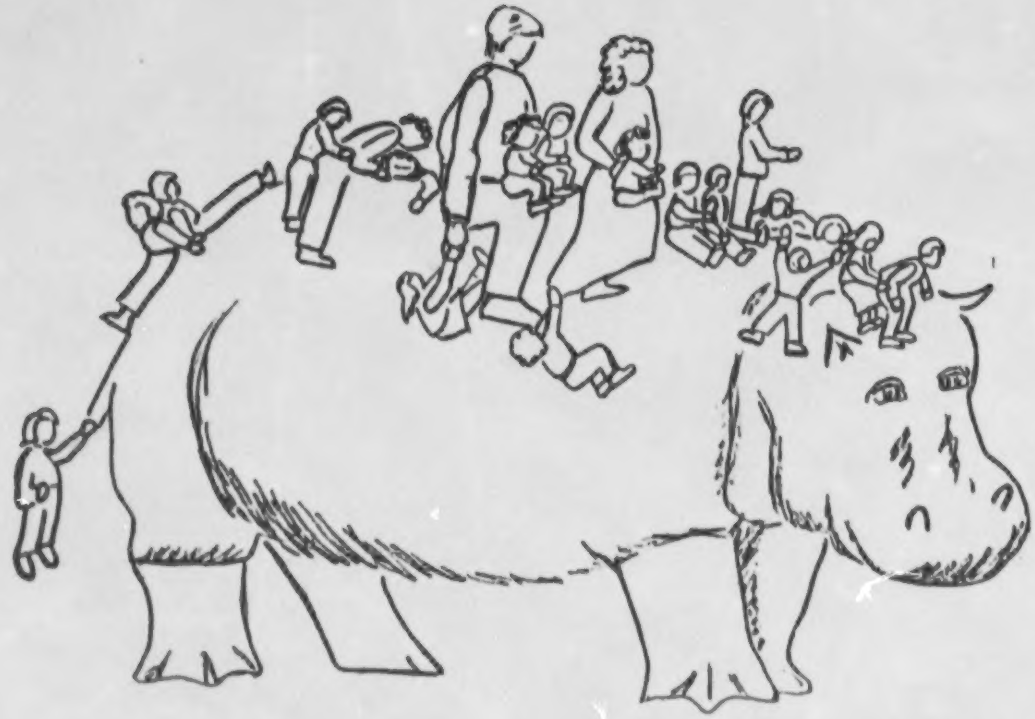

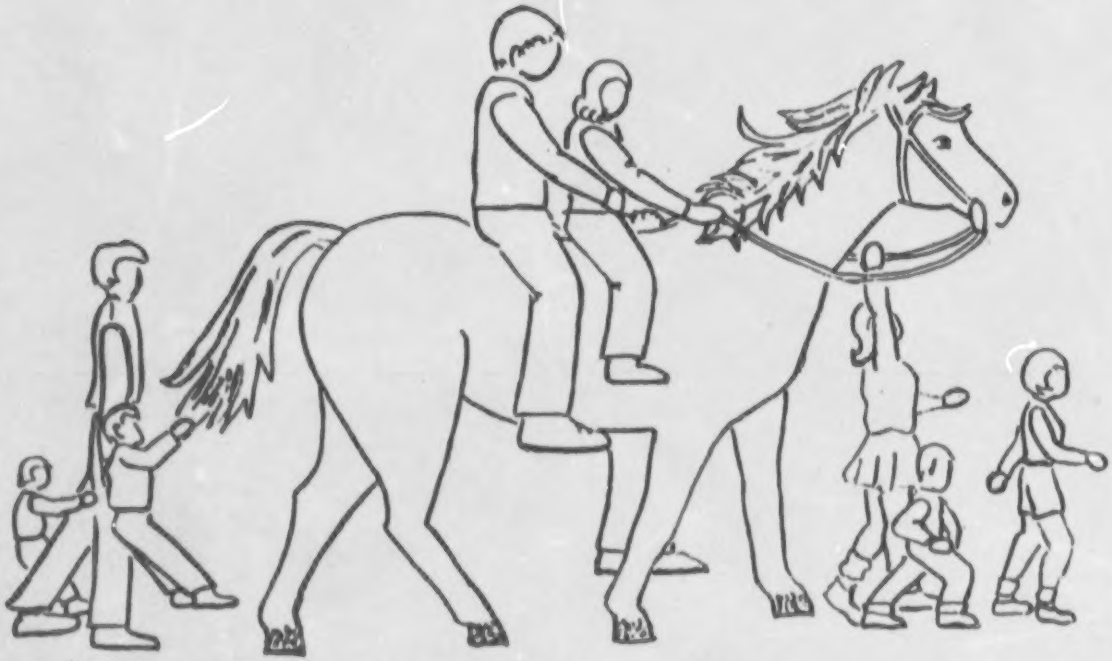

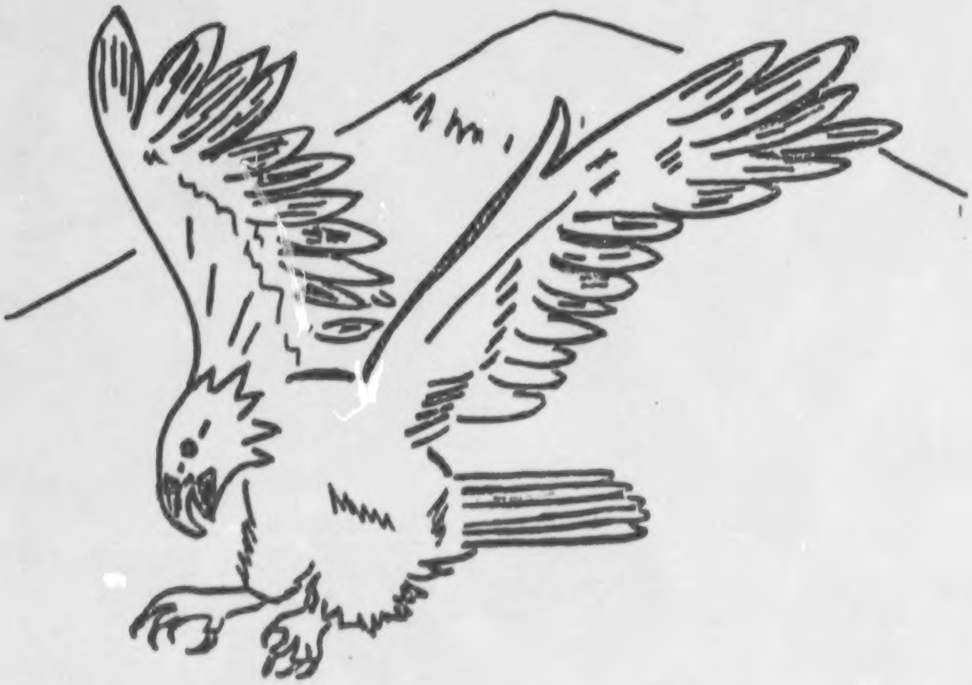

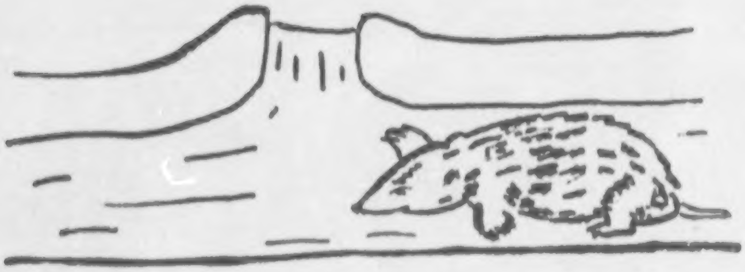

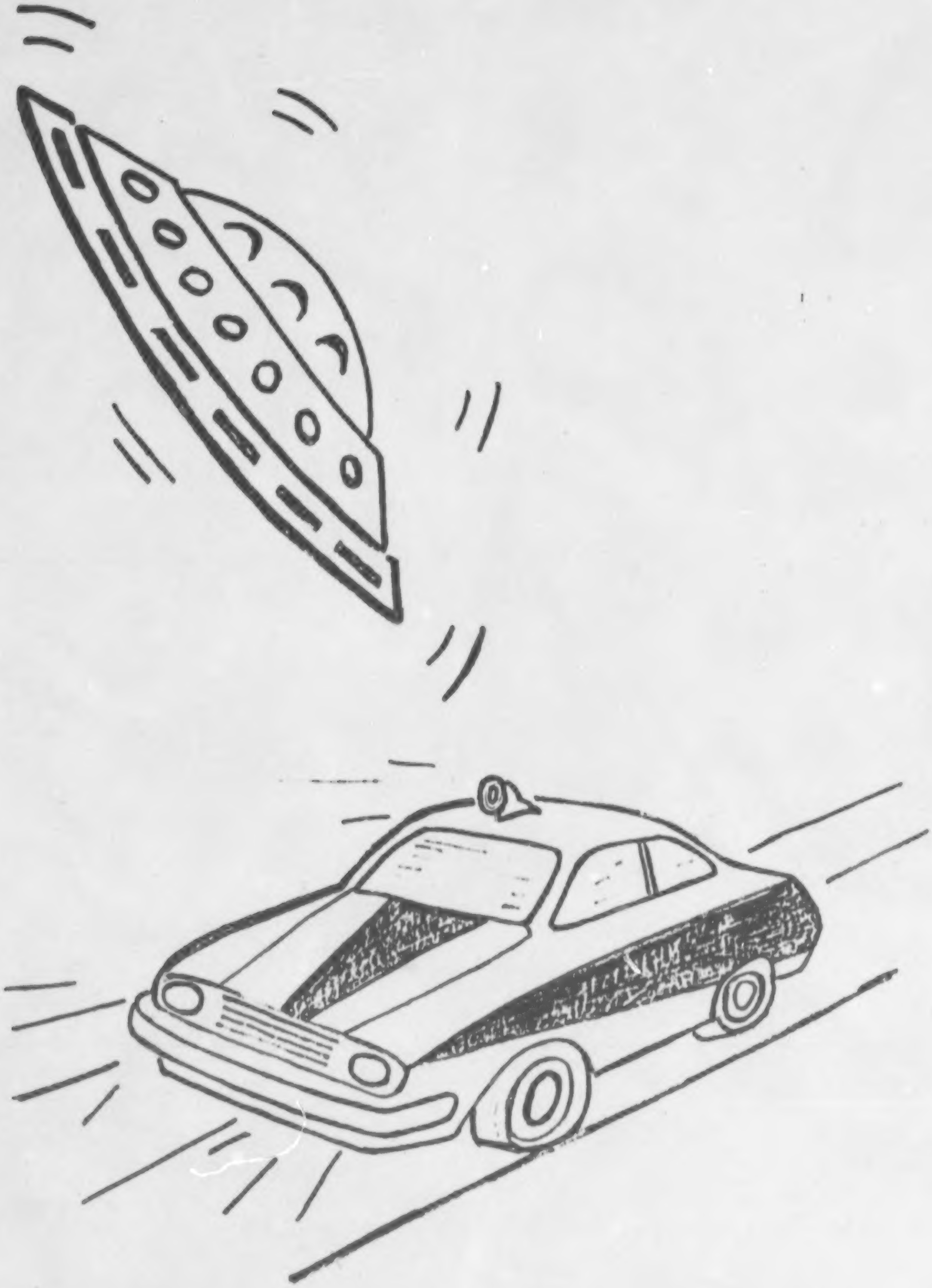

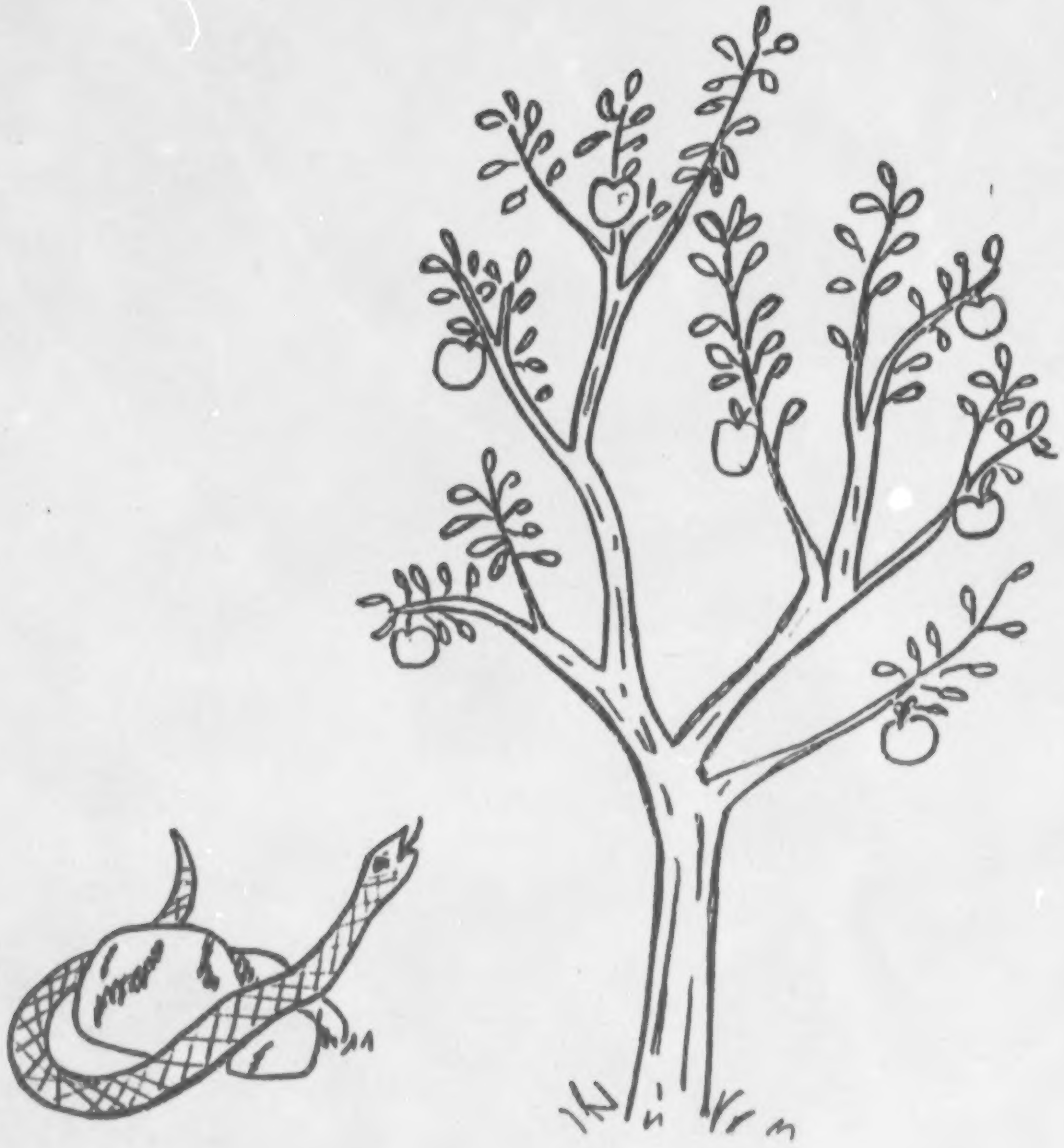

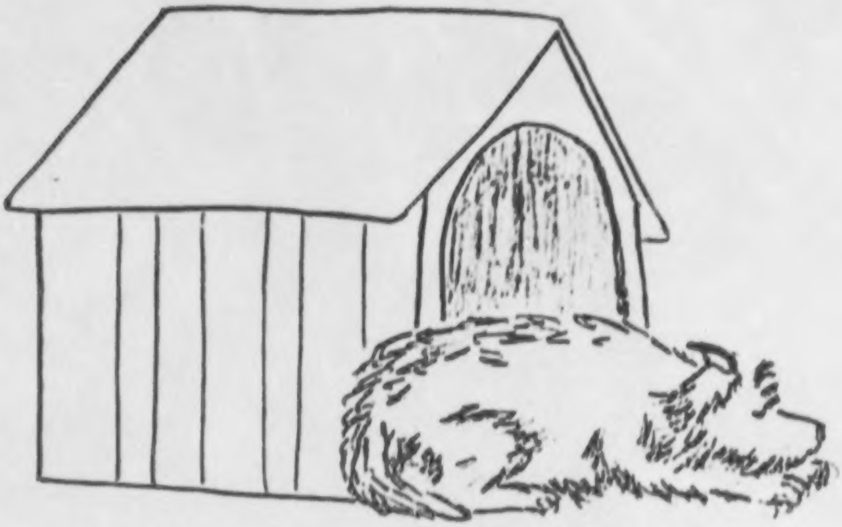

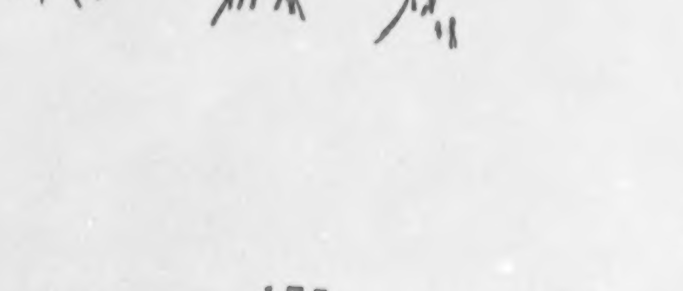

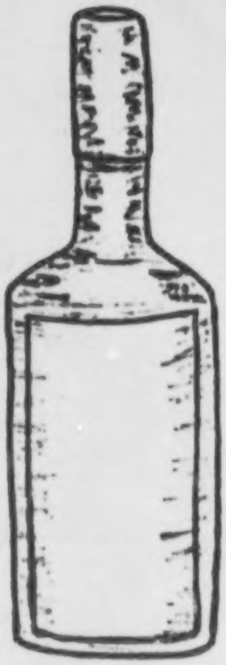

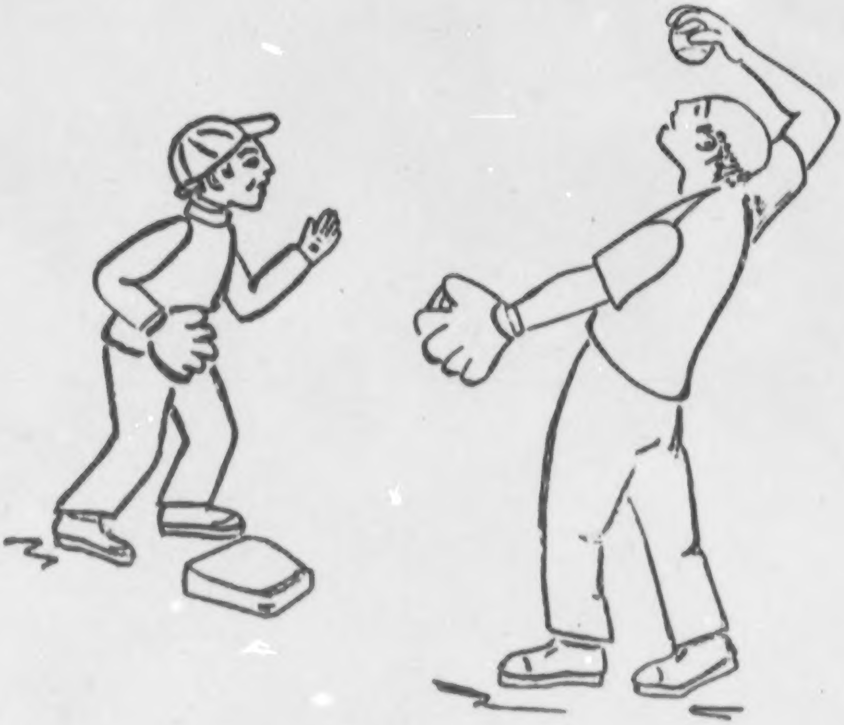

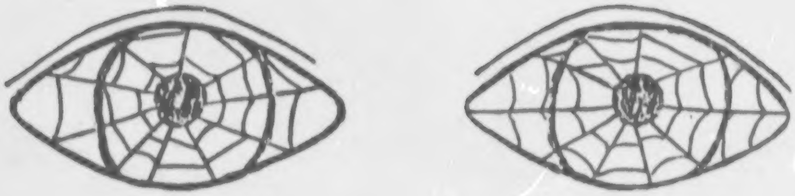

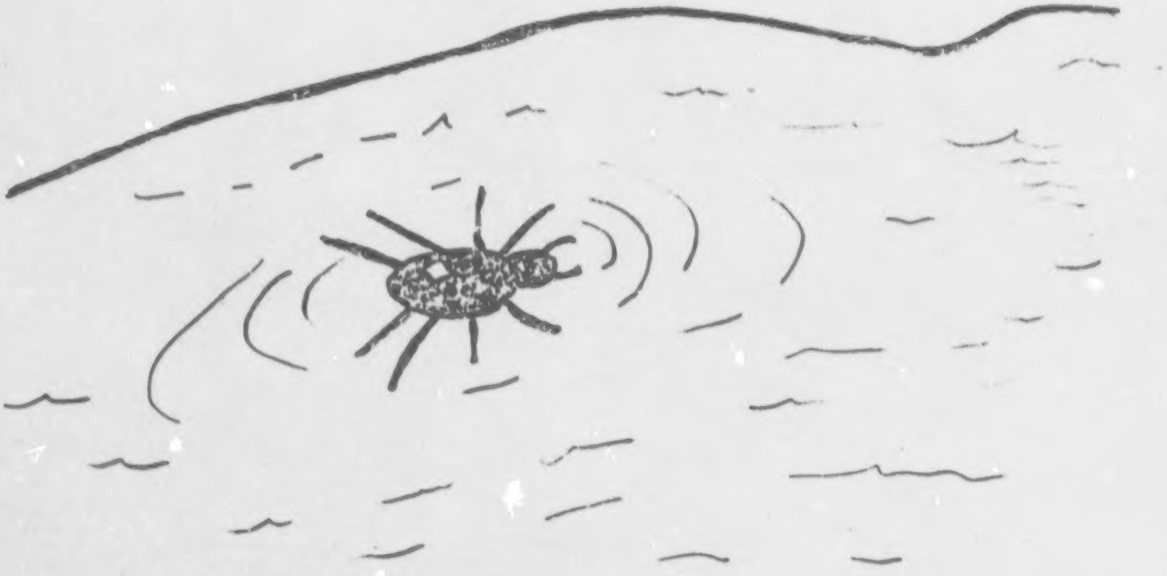

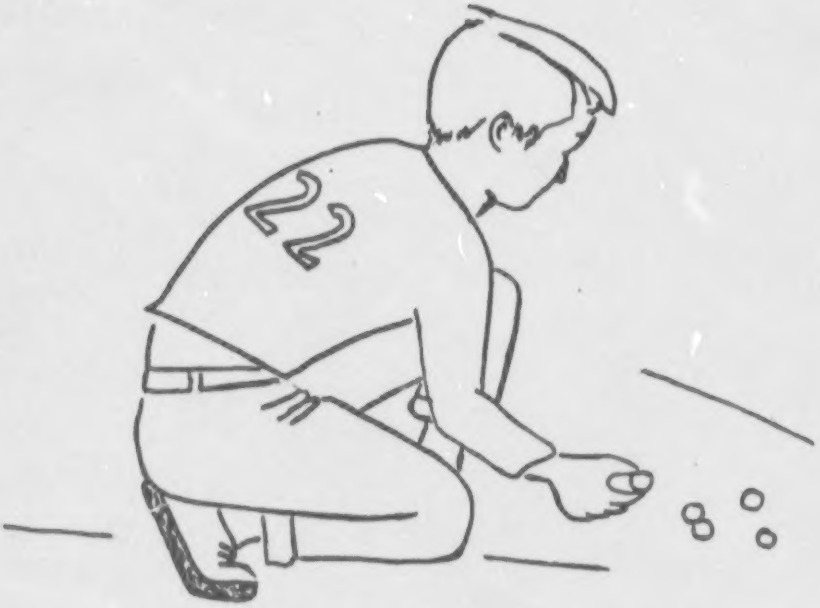
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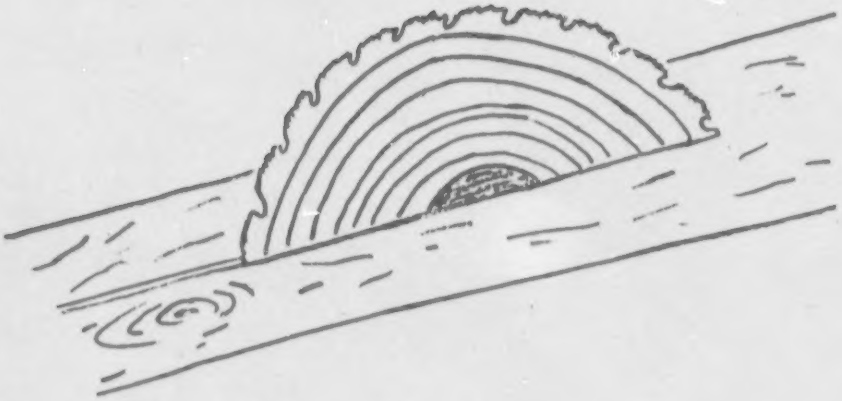

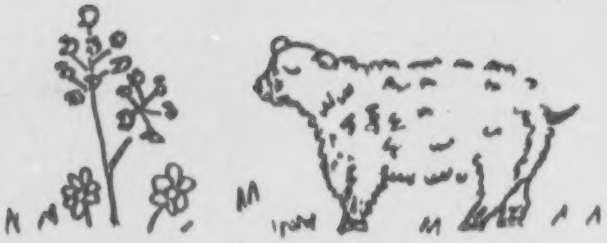

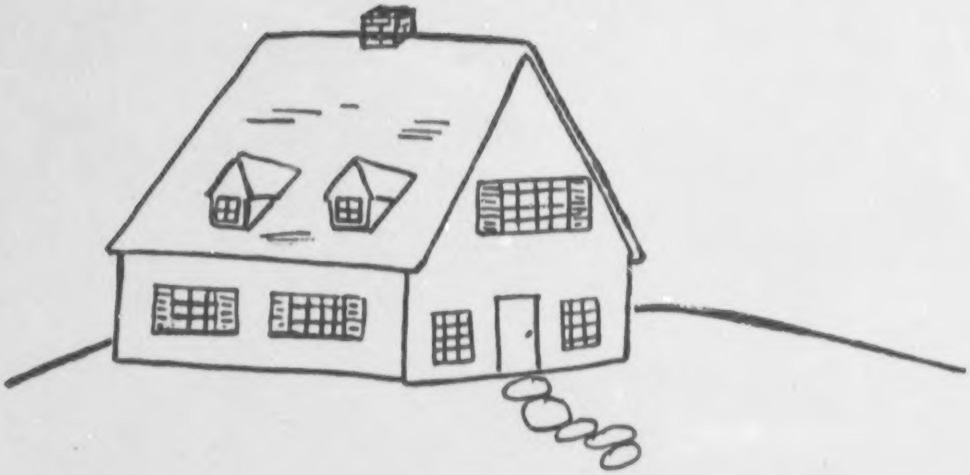

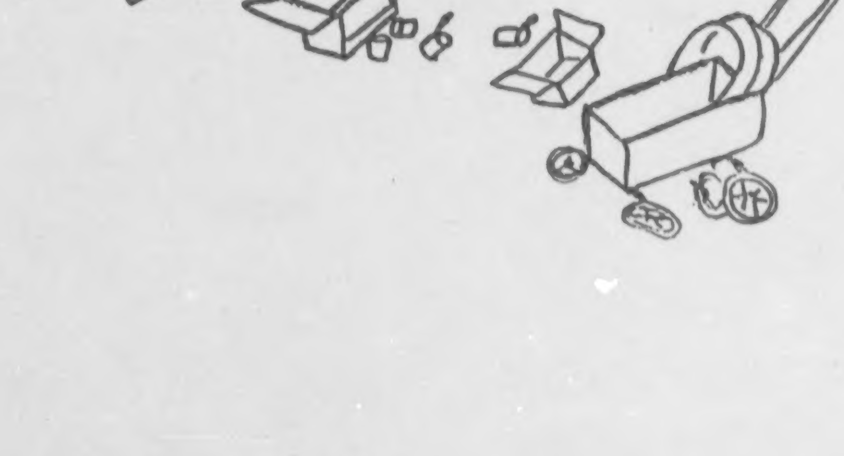

Transparency Ratings

Table 15
CHILDREN'S AND TEACHERS' RATINGS FOR ALL TRANSPARENCIES

		Ratings						
Poem	C-T	7	6	5	4	3	2	1
Mummy Slept	C	17	26	8	10	3	2	1
	T	2	1					
Catalogue	C	15	28	11	4	2	3	2
	T	2	1					
Traveling...	C	9	8	11	8	3	14	9
	T	2	1					
Jake Hates...	C	8	27	10	8	4	3	1
	T	2	1					
Bats	C	9	10	11	12	3	8	9
	T		1	1	1			
Early Warning	C	3	5	5	6	12	18	16
	T	2	1					
An Easy...	C	22	26	4	5	3	2	2
	T	2			1			
Richard Cory	C	3	9	5	11	2	10	4
	T	1		1				
My Papa's...	C	5	7	6	8	2	6	7
	T	1			1			
The Bagel	C	11	17	8	4	3	5	1
	T		1	1				
A Poison...	C	5	15	6	3		7	
	T		1			1		
The Tiger	C	8	11	10	4	2	5	2
	T		1	1				
Southbound...	C	7	23	4	5	1	2	
	T	1	1					
Pete...	C	5	15	9	3	4	4	1
	T	1	1					
Patterns	C	13	11	3	8	1	3	2
	T		1				1	
Fueled	C	1	5	6	3	4	2	0
	T			2				
Fast Run...	C	4	5	5	10	4	11	4
	T			2				
Evans,	C	3	3	1	5	1	6	3
	T		1					
Animals...	C	8	7	7	6	5	4	4
	T	1			1			
The Eagle...	C	15	15	4	6		2	1
	T	1	1					
Out, Out	C	1	4	4	3		2	5
	T	1						
Silver	C	3	9	5	4		3	
	T				1			
...Calf	C	1	4	3	9	1	2	1
	T	1						
The Tatoo	C	4	10	3	2	5		
	T			1				

APPENDIX C RESUME OF THREE POETS

Carol Burke

Carol Burke received her MA in English and MFA in Creative Writing from Cornell University and has completed her doctoral course work. In addition to teaching creative writing at Cornell, she has taught at Purdue University and State University of New York at Cortland.

Since 1972, Ms. Burke has served as poet-in-residence in New York and Indiana schools. She has conducted numerous poetry and writing workshops and has given many readings and lectures over the past seven years. Since 1976, she has served as Special Projects Editor for *Indiana Writes*. Her works include *Close Quarters* (1975) and poems published in magazines such as *Hiram Poetry Review*, *The Ark River Review*, *Epoch*, *Rapport*, and *The Remington Review*.

Carol Burke is listed in *The Directory of American Poets and Writers*, *Who's Who of American Women*, *Contemporary Authors*, and *The Directory of Women Writing*.

Jared Carter

Jared Carter attended Yale College, Ball State University, and Goddard College, where he received a B.A. degree in liberal arts. He has served as part-time instructor of creative writing and poetry at Indiana-Purdue University in Indianapolis and as part-time creative writing instructor in the Prison Education Development Project sponsored by Indiana University.

Before becoming a poet-in-residence for Indiana schools in 1977, Mr. Carter worked as a reporter and photographer, a freelance editor and a book designer. From 1973 to 1976, he served as a managing editor for Bobbs-Merrill Publishing of Indianapolis.

Most publications by Jared Carter appear in poetry magazines such as The Nation, Indiana Writes, Yale Literary Magazine, The Spoon River Quarterly, Ascent, Road Apple Review, and Indianapolis Journal. Two of his poems have been anthologized in The Indiana Experience (edited by Arnold Lazarus). Also, Mr. Carter has published two short stories, several articles, and a book entitled A Writer's Guide to Book Publishing.

Donald Seybold

Soon after starting as a high school English teacher for the Franklin Community Schools, Donald Seybold began work on his M.A.T. in English at Indiana University. He received his degree in 1970 and the following year began work on a doctoral program at Purdue University.

From 1968 to 1971, he was the Assistant Director at the English Curriculum Study Center at Indiana University. During that time, he co-authored four books and wrote numerous articles on issues in English education, and participated in over a hundred workshops for teachers. From 1971 to 1976, he taught undergraduate and graduate courses in English and Education at Purdue University. For the past two and a half years, he has worked as a freelance writer and consultant in education. Currently, he is a visiting-instructor in English at Purdue.

Mr. Seybold has attained national visibility through his written works, public debates, and workshops in English education. As a craftsman of literary ventures, he is just beginning: in circulation are fifteen poems, three short stories, and a drama. Works in progress include a novel and a novella.

APPENDIX D SELECTION OF POEMS

Original Selections

Table 16
POETS' AND TEACHERS' POETRY PREFERENCES

	Poets			Teachers		
Title of Poem	A	B	C	A	B	C
The Moss on His Skin	x	x	no	no	x	no
Catalogue	x	x	no	x	x	x
The Tatoo	x	x	x	x	x	x
Lighthearted William	x	x	x	no	no	no
Mummy Slept Late...	x	x	x	x	x	x
Richard Cory	x	x	no	x	x	x
The Animals Mourn...	x	x	no	x	x	x
The Boat	x	no	no	no	no	no
The Great Blue Heron	no	x	no	x	no	x
Pete at the Zoo	x	no	x	x	x	x
Man in the Dead Machine	no	x	x	x	no	x
The Eagle and The Mole	no	x	x	x	x	x
Bats	x	x	x	x	x	x
My Papa's Waltz	x	x	x	x	x	x
Star Swirls	x	no	no	x	x	no
A Poison Tree	x	x	no	x	x	x
Jake Hates All the Girls	x	x	no	x	x	x
Fueled	x	x	no	x	x	x
Southbound...Freeway	x	x	x	x	x	x
The Tiger	x	x	no	x	x	x
Patterns	x	x	no	x	x	x
Out, Out	x	x	no	x	x	x
An Easy Decision	x	x	x	x	x	x
Fast Run...Junkyard	no	x	x	x	x	x

x = yes

Final Selections

PETE AT THE ZOO

I wonder if the elephant
Is lonely in his stall
When all the boys and girls are gone
And there's no shout at all,
And there's no one to stamp before,
No one to note his might.
Does he hunch up, as I do,
Against the dark of night?

by Gwendolyn Brooks

2.

MUMMY SLEPT LATE AND DADDY FIXED BREAKFAST

Daddy fixed breakfast.
He made us each a waffle.
It looked like gravel pudding.
It tasted something awful.

"Ha, ha," he said, "I'll try again.
This time I'll get it right."
But what _I_ got was in between
Bituminous and anthrocite.

"A little too well done? Oh well,
I'll have to start all-over."
That time what landed on my plate
Looked like a manhole cover.

I tried to cut it with a fork:
The fork gave off a spark.
I tried a knife and twisted it
Into a question mark.

I tried it with a hack-saw.
I tried it with a torch.
It didn't even make a dent.
It didn't even scorch.

The next time Dad gets breakfast
When Mommy's sleeping late,
I think I'll skip the waffles.
I'd sooner eat the plate.

by John Ciardi

CATALOGUE

Cats sleep fat and walk thin.
Cats, when they sleep, slump;
When they wake, stretch and begin
Over, pulling their ribs in.
Cats walk thin.

Cats wait in a lump,
Jump in a streak.
Cats, when they jump, are sleek
As a grape slipping its skin-
They have technique.
Oh, cats don't creak.
They sneak.

Cats sleep fat.
They spread out comfort underneath them
Like a good mat,
As if they picked the place
And then sat;
You walk around one
As if he were the City Hall
After that.

If male,
A cat is apt to sing on a major scale;
This concert is for everybody, this
Is wholesale.
For a baton, he wields a tail.

(He is also found,
When happy, to resound
With an enclosed and private sound.)

A cat condenses.
He pulls in his tail to go under bridges,
And himself to go under fences.
Cats fit
In any size box or kit,
And if a large pumpkin grew under one,
He could arch over it.

When everyone else is just ready to go out,
The cat is just ready to come in.
He's not where he's been.
Cats sleep fat and walk thin.

by Rosalie Moore

EVANS

Evans? Yes, many a time
I came down his bare flight
Of stairs into the gaunt kitchen
With its wood fire, where crickets sang
Accompaniment to the black kettle's
Whine, and so into the cold
Dark to smother in the thick tide
Of night that drifted about the walls
Of his stark farm on the hill ridge.

It was not the dark filling my eyes
And mouth that appalled me; not even the drip
Of rain like blood from one tree
Weather-tortured. It was the dark
Silting of the veins of that sick man
I left stranded upon the vast
and lonely shore of his bleak bed.

by R. S. Thomas

EARLY WARNING

When the weather turned
Crows settled about the house
Cawing daylong among the new leaves.
It would be a hard spring.
Folks said, the crows--
They know. There are folks
Up near where I come from
In Mississinewa County
Who study such things.
Folks who believe tornadoes
Are alive: that polluted streams
Rise from their beds
Like lepers, following after
Some great churning, twisting cloud.
With their own eyes
They've seen a cyclone stop,
Lap up electricity
From a substation, then make
A right-angle turn
And peel the roof off some
Prefabricated egg factory.
Thousands of hens, who've never seen
The light of the sun, or
Touched the earth with their beaks,
Go up the funnel like souls to God.

by Jared Carter

THE BAGEL

I stopped to pick up the bagel
rolling away in the wind,
annoyed with myself
for having dropped it
as if it were a portent.
Faster and faster it rolled,
with me running after it
bent low, gritting my teeth,
and I found myself doubled over
and rolling down the street
head over heels, one complete somersault
after another like a bagel
and strangely happy with myself.

by David Ignatow

THE TWO-HEADED CALF

Tomorrow when the farm boys find this
freak of nature, they will wrap his body
in newspaper and carry him to the museum.

But tonight he is alive and in the north
field with his mother. It is a perfect
summer evening: the moon rising over
the orchard, the wind in the grass.
And as he stares into the sky, there
are twice as many stars as usual.

by Laura Gilpin

PATTERNS

The night set softly
With the hush of falling leaves
Casting shivering shadows
On the houses through the trees

And the light from a street lamp
Paints a pattern on my wall
Like the pieces of a puzzle
Or a child's uneven scrawl.

Up a narrow flight of stairs
In a narrow little room
As I lie upon my bed
In the early evening gloom

Impaled on my wall
My eyes can dimly see
The pattern of my life
And the puzzle that is me.

From the moment of my birth
To the instant of my death
There are patterns I must follow
Just as I must breathe each breath.

Like a rat in a maze
The path before me lies
And the pattern never alters
Until the rat dies.

And the pattern still remains
On the wall where darkness fell

And it's fitting that it should
For in darkness I must dwell.

Like the color of my skin
Or the day that I grow old
My life is made of patterns
That can scarcely be controlled.

by Paul Simon

TRAVELING THROUGH THE DARK

Traveling through the dark I found a deer
dead on the edge of the Wilson River road.
It is usually best to roll them into the canyon:
the road is narrow; to swerve might make more dead.
By glow of the tail-light I stumbled back of the car
and stood by the heap, a doe, a recent killing;
she had stiffened already, almost cold.
I dragged her off; she was large in the belly.

My fingers touching her side brought me the reason --
her side was warm; her fawn lay there waiting,
alive, still, never to be born.
Beside that mountain road I hesitated.

The car aimed ahead its lowered parking lights;
under the hood purred the steady engine.
I stood in the glare of the warm exhaust turning red;
around our group I could hear the wilderness listen.

I thought hard for us all -- my own swerving --
then pushed her over the edge into the river.

by William Stafford

FUELED

Fueled
by a million
man-made
wings of fire-
the rocket tore a tunnel
through the sky-
and everybody cheered.
Fueled
only by a thought from God-
the seedling
urged its way
through the thicknesses of black-
and as it pierced
the heavy ceiling of the soil-
and launched itself
up into outer space-
no
one
even
clapped.

by Marcie Hans

JAKE HATES ALL THE GIRLS

jake hates
all the girls (the
shy ones, the bold
ones; the meek
proud sloppy sleek)
all except the cold
ones

paul scorns all
the girls (the
bright ones, the dim
ones; the slim
plump tiny tall)
all except the
dull ones

gus loves all the
girls (the
warped ones, the lamed
ones; the mad
moronic maimed)
all except
the dead ones

mike likes all the girls
(the
fat ones, the lean
ones; the mean
kind dirty clean)
all
except the green ones

by E. E. Cummings

RICHARD CORY

Whenever Richard Cory went down town,
We people on the pavement looked at him:
He was a gentleman from sole to crown,
Clean favored, and imperially slim.

And he was always quietly arrayed,
And he was always human when he talked;
But still he fluttered pulses when he said,
"Good morning," and he glittered when he walked.

And he was rich - yes, richer than a king-
And admirably schooled in every grace:
In fine, we thought that he was everything
To make us wish that we were in his place.

So on we worked, and waited for the light,
And went without the meat, and cursed the bread;
And Richard Cory, one calm summer night,
Went home and put a bullet through his head.

by Edwin Arlington Robinson

AN EASY DECISION

I had finished my dinner
Gone for a walk
It was fine
Out and I started whistling

It wasn't long before

I met a
Man and his wife riding on
A pony with seven
Kids running along beside them

I said hello and

Went on
Pretty soon I met another
Couple
This time with nineteen
Kids and all of them
Riding on
A big smiling hippopotamus

I invited them home

by Kenneth Patchen

THE EAGLE AND THE MOLE

Avoid the reeking herd,
Shun the polluted flock,
Live like that stoic bird,
The eagle of the rock.

The huddled warmth of crowds
Begets and fosters hate;
He keeps, above the clouds,
His cliff inviolate.

When flocks are folded warm,
And herds to shelter run,
He sails above the storm,
He stares into the sun.

If in the eagle's track
Your sinews cannot leap,
Avoid the lathered pack,
Turn from the steaming sheep.

If you would keep your soul
From the spotted sight or sound,
Live like the velvet mole;
Go burrow underground.

And there hold intercourse
With roots of trees and stones,
With rivers at their source,
And disembodied bones.

by Elinor Wylie

15.

SOUTHBOUND ON THE FREEWAY

A tourist came in from Orbitville,
parked in the air and said:

the creatures of this star
are made of metal and glass.

Through the transparent parts
you can see their guts.

Their feet are round and roll
on diagrams or long

measuring tapes, dark
with white lines.

They have four eyes.
the two in the back are red.

Sometimes you can see a five-eyed
one, with a red eye turning

on the top of his head.
He must be special--

the others respect him
and go slow

when he passes, winding
among them from behind.

They all hiss as they glide,
like inches, down the marked

tapes. Those soft shapes,
shadowy inside

the hard bodies--are they
their guts or their brains?

by May Swenson

A POISON TREE

I was angry with my friend,
I told my wrath, my wrath did end
I was angry with my foe,
I told it not, my wrath did grow.

And I water'd it in fears,
Night & morning with my tears;
And I sunned it with smiles,
And with soft deceitful wiles.

And it grew both day and night,
Till it bore an apple bright;
And my foe beheld it shine,
And he knew that it was mine,

And into my garden stole,
When the night had veil'd the pole;
In the morning glad I see
My foe outstretch'd beneath the tree.

by William Blake

17.

SILVER

Slowly, silently, now the moon
Walks the night in her silver shoon;
This way, and that, she peers, and sees
Silver fruit upon silver trees;
One by one the casements catch
Her beams beneath the silvery thatch;
Couched in his kennel, like a log,
With paws of silver sleeps the dog;
From their shadowy cote the white breasts peep
Of doves in a silver feathered sleep;
A harvest mouse goes scampering by,
With silver claws and a silver eye;
And moveless fish in the water gleam,
By silver reeds in a silver stream.

by Walter de la Mare

THE ANIMALS MOURN WITH EVE

Thus she sat weeping,
Thus Eve, our mother,
Where one lay sleeping
Slain by his brother.
Greatest and least
Each piteous beast
To hear her voice
Forgot his joys
And set aside his feast.

The mouse paused in his walk
And dropped his wheaten stalk;
Grave cattle wagged their heads
In rumination;
The eagle gave a cry
From his cloud station;
Larks on thyme beds
Forbore to mount or sing;
Bees drooped upon the wing;
The raven perched on high
Forgot his ration;
The conies in their rock,
A feeble nation,
Quaked sympathetical;
The mocking-bird left off to mock;
Huge camels knelt as if
In deprecation;

The kind hart's tears were falling;
Chattered the wistful stork;
Dove-voices with a dying fall
Cooed desolation,
Answering grief by grief.

Only the serpent in the dust,
Wriggling and crawling,
Grinned an evil grin and thrust
His tongue out with its fork.

by Christina Rossetti

BATS

A bat is born
Naked and blind and pale.
His mother makes a pocket of her tail
And catches him. He clings to her long fur
By his thumbs and toes and teeth.
And then the mother dances through the night
Doubling and looping, soaring, somersaulting-
Her baby hangs on underneath.
All night, in happiness, she hunts and flies.
Her high sharp cries
Like shining needlepoints of sound
Go out into the night and, echoing back,
Tell her what they have touched.
She hears how far it is, how big it is,
Which way it's going:
She lives by hearing.
The mother eats the moths and gnats she catches
In full flight; in full flight
The mother drinks the water of the pond
She skims across. Her baby hangs on tight.
Her baby drinks the milk she makes him
In moonlight or starlight, in mid-air.
Their single shadow, printed on the moon
Or fluttering across the stars,
Whirls on all night; at daybreak
The tired mother flaps home to her rafter.
The others all are there.
They hang themselves up by their toes,
They wrap themselves in their brown wings.
Bunched upside-down, they sleep in air.
Their sharp ears, their sharp teeth, their quick sharp faces
Are dull and slow and mild.
All the bright day, as the mother sleeps,
She folds her wings about her sleeping child.

by Randall Jarrell

20.

MY PAPA'S WALTZ

The whiskey on your breath
Could make a small boy dizzy;
But I hung on like death:
Such waltzing was not easy.

We romped until the pans
Slid from the kitchen shelf;

My mother's countenance
Could not unfrown itself.

The hand that held my wrist
Was battered on one knuckle;
At every step you missed
My right ear scraped a buckle.

You beat time on my head
With a palm caked hard by dirt,
Then waltzed me off to bed
Still clinging to your shirt.

by Theodore Roethke

THE TATOO

The light is like a spider
It crawls over the water.
It crawls over the edges of the snow.
It crawls under your eyelids.
And spreads its webs there--
Its two webs.

The webs of your eyes
Are fastened
To the flesh and bones of you
As rafters or grass.

There are filaments of your eyes
On the surface of the water
And in the edges of the snow.

by Wallace Stevens

OUT, OUT

The buzz-saw snarled and rattled in the yard
And made dust and dropped stove-length sticks of wood,
Sweet-scented stuff when the breeze drew across it.
And from there those that lifted eyes could count
Five mountain ranges one behind the other
Under the sunset far into Vermont.
And the saw snarled and rattled, snarled and rattled,
As it ran light, or had to bear a load.
And nothing happened: day was all but done.
Call it a day, I wish they might have said
To please the boy by giving him the half hour
That a boy counts so much when saved from work.
His sister stood beside them in her apron
To tell them "Supper." At the word, the saw,
As if to prove saws knew what supper meant,
Leaped out at the boy's hand, or seemed to leap-
He must have given the hand. However it was,
Neither refused the meeting. But the hand!
The boy's first outcry was a rueful laugh,
As he swung toward them holding up the hand
Half in appeal, but half as if to keep
The life from spilling. Then the boy saw all-
Since he was old enough to know, big boy
Doing a man's work, though a child at heart-
He saw all spoiled. "Don't let them cut my hand off-
The doctor, when he comes. "Don't let him, sister!"
So. But the hand was gone already.
The doctor put him in the dark of ether.
He lay and puffed his lips out with his breath.
And then - the watcher at his pulse took fright.
No one believed. They listened at his heart.
Little - less - nothing! - and that ended it.
No more to build on there. And they, since they
Were not the one dead, turned to their affairs.

by Robert Frost

THE TIGER

Tiger, tiger, burning bright
In the forest of the night,
What immortal hand or eye
Could frame thy fearful symmetry?

In what distant deeps or skies
Burnt the fire of thine eyes?
On what wings dare he aspire?
What the hand dare seize the fire?

And what shoulder, and what art,
Could twist the sinews of thy heart?
When thy heart began to beat,
What dread hand forged thy dread feet?

What the hammer? What the chain?
In what furnace was thy brain?
What the anvil? What dread grasp
Dared its deadly terrors clasp?

When the stars threw down their spears,
And watered heaven with their tears,
Did He smile his work to see?
Did He who made the lamb make thee?

Tiger, tiger, burning bright
In the forest of the night,
What immortal hand or eye
Dare frame thy fearful symmetry?

by William Blake

FAST RUN IN THE JUNKYARD

That junkyard fell down the side of the hill
like a river: baby buggy, black leather
cracked car back seat, sofa wind-siphoned
by a clutch of tangled wire hangers hanging on
like spiders. We stood and fell as momentum told us
toward somebody's sodden Sealey dying of galloping miasma,
jumped on bedsprings sprung to pogos, and leaped
for king-of-the-mountain where boxes and cans fountained
up the hill's other side. Sailing saucers, we rode
back down, flinging hat racks, burlap sacks, chairs cropped
of backs and flotsam crockery, breezed in league boots
back out of everybody's past hazards, up to the road
to break tar bubbles all-the-way-home where things
were wearing out as fast as we were growing up.

by Jeannette Nichols

APPENDIX E SAMPLE LOGGING PAGE WHICH TEACHERS AND POETS USED WITH EACH POEM

POEM TITLE: ______________________________ PAGE __________

____

1. Induction Activitives:

3. Search (Key Elements of Poem):

4. Application to Generalization and to Experience:

APPENDIX F MEASUREMENTS

Total Response to "A Look at Literature"

"A Look at Literature" is a test that measures interpretive responses to imaginative prose and poetry. It is a 50 item, multiple-choice test in which the reader is asked to respond to questions about poems and short prose selections which are presumably unfamiliar to him. The test consists of two parts. Part I is given with the test administrator reading aloud the poems selections, questions, and possible answers, while the students read along silently and then mark their responses. Part II involves the students in reading the test silently and then marking their responses. Each section of the test takes approximately 35 minutes to administer; however, the test is untimed.

The responses modes for the test are essentially three: (1) Translation, which covers low-level inference, recognition, definition, and restatement items; (2) Extension, which deals with high-level inference, interpretation, comparisons, and prediction; (3), Awareness, which focuses on perception of style and recognition of point of view.

Two forms of the test (Forms A and B) are available from Addison-Wesley Testing Service; Reading, Massachusetts 01867. Each form has a reliability coefficient of .83. The Standard Error of Measurement for Form A is 3.17; for Form B, 3.13.

"11 Critical Items Measurement"

Eleven items from Form B of "A Look at Literature" were used for this special analysis of responses to poetry. Below are listed the item numbers of the test and the reasons for their choices.

Item	Reason for Choice
6	Applies a given figure of speech to a character.
8	Identifies the "right surprise."
9	Applies personification to a given line.
11	Applies a metaphoric image to a given comparison.
15	Identifies meaning of a metaphoric description.
17	Matches poetic elements with given lines.
22	Identifies poetic line that signals tone/intent.
23	Identifies traits of personification.
24	Identifies images that influence tone.
41	Identifies literal meaning for a given metaphor.
42	Applies meaning of the poem to a given condition (which is related to the Application Stage of the ISSA Model).

For reasons similar to the ones given above, the following items were chosen in Form A, the pre-test: 6, 7, 13, 14, 15, 16, 17, 23, 24, 39, and 40.

APPENDIX G SEX AS A VARIABLE

Results of pre-test scores for the "11 Critical Items Measurement" show little mean-score difference attributable to sex: the boys scored 6.04, and the girls scored 6.25. Post-test scores show a slightly larger difference: boys, 6.07; girls, 6.57. After examining the data in Tables 17 and 18, the investigator saw no cause to adjust the treatment means for any difference due to sex.

Table 19 has been added for any reader who may be interested in comparing treatment scores by class and sex. However, the reader should keep in mind that the data in Table 19 does not represent an accurate account of gains and that both the pre-and post-tests are only estimates which are subject to error.

Table 17
"11 CRITICAL ITEMS MEASUREMENT" PRE-TEST SCORES ACCORDING TO TREATMENT AND SEX

Treatment	Boys	Girls	Total
A: Teachers	6.58 (n=33)	5.34 (n=35)	5.94 (n=68)
B: Teachers and Media	5.86 (n=28)	6.32 (n=40)	6.13 (n=68)
C: Poets	5.73 (n=37)	6.48 (n=31)	6.07 (n=68)
D: Control	5.50 (n=36)	6.47 (n=32)	5.96 (n=68)
Total	6.04	6.25	

Table 18
"11 CRITICAL ITEMS MEASUREMENT" POST-TEST SCORES ACCORDING TO TREATMENT AND SEX

Treatment	Boys	Girls	Total
A: Teachers	5.55 (n=33)	5.49 (n=35)	5.52 (n=68)
B: Teachers and Media	6.37 (n=28)	6.83 (n=40)	6.63 (n=68)
C: Poets	6.35 (n=37)	7.23 (n=31)	6.75 (n=68)
D: Control	6.03 (n=36)	6.81 (n=32)	6.40 (n=68)
Total	6.07	6.57	

Table 19
"11 CRITICAL ITEMS MEASUREMENT" PRE- AND POST-TEST SCORES
ACCORDING TO SCHOOL CORPORATION, CLASS, SEX AND TREATMENT

Treatment		SCHOOL CORPORATIONS					
		X		Y		Z	
		Pre	Post	Pre	Post	Pre	Post
A: Teachers	Boys	8.0	7.8	7.0	5.8	5.5	3.6
	Girls	6.0	5.2	5.0	6.1	5.1	5.2
B: Media & Teachers	Boys	7.5	7.8	4.2	4.5	5.1	5.9
	Girls	7.3	7.8	6.4	6.8	5.5	6.1
C: Poets	Boys	6.1	7.2	6.5	7.4	4.9	4.9
	Girls	7.8	8.9	6.7	6.4	5.0	6.2
D: Control	Boys	6.2	7.2	5.5	5.2	4.9	5.6
	Girls	8.5	8.3	6.4	6.2	5.2	6.1